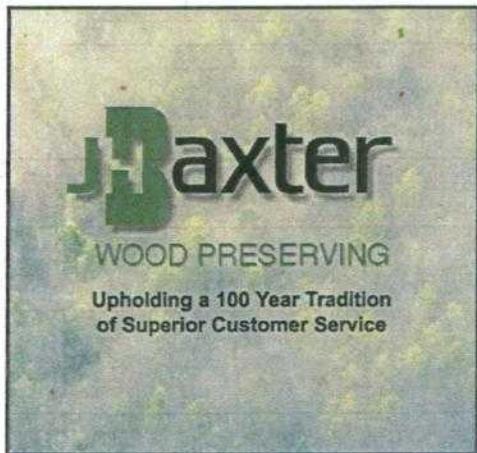




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FIRST QUARTER 2013 OPERATIONS AND MONITORING REPORT - REMEDIAL ACTION PILOT STUDY

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington



Prepared for:

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue
Seattle, Washington 98101

Submitted by:

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Prepared by:

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July 2013

Project No. 3-61M-125611



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July 15, 2013

JUL 16 2013

Jan Palumbo (AWT-121)
United States EPA, Region 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101

Office of Air, Waste & Toxics

Subject: First Quarter 2013 Operations and Monitoring Report
J.H. Baxter Arlington Facility
Docket No. RCRA-10-2001-0086

Dear Ms. Palumbo:

Please find enclosed two copies of the First Quarter 2013 Operations and Monitoring Report. A compact disk containing the electronic files is also included. If you have any questions, please do not hesitate to contact me at (503) 639-3400.

Sincerely,

AMEC Environment & Infrastructure, Inc.

J. Stephen Barnett
Senior Geologist

c: Georgia Baxter, J.H. Baxter & Co.
Jamie Hillery, Stella Jones Corp.
Mike Wolanek, City of Arlington
Jeanne Tran, Ecology

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FIRST QUARTER 2013 OPERATIONS AND MONITORING REPORT REMEDIAL ACTION PILOT STUDY

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

1.0 INTRODUCTION

The J.H. Baxter Project Team, consisting of J.H. Baxter & Co. (Baxter) and AMEC Environment & Infrastructure, Inc. (AMEC) have prepared this First Quarter 2013 Operations and Monitoring Report - Remedial Action Pilot Test for the Stella-Jones (formerly Baxter) Arlington, Washington, wood treating facility (Arlington facility, facility, or site), located at 6520 188th Street NE [Figure 1]). This report discusses activities completed during the period from January 1, 2013 through March 31, 2013.

The Remedial Action Pilot Study is considered part of the ongoing Corrective Measures Study (CMS), which is being implemented pursuant to Paragraph 53 of the United States Environmental Protection Agency (EPA) Administrative Order on Consent (AOC) dated April 30, 2001 (EPA, 2001). All CMS-related activities were conducted consistent with guidance provided by EPA in the Resource Conservation and Recovery Act (RCRA) Corrective Action Plan (Final), dated May 1994 (EPA, 1994), the Corrective Action Advance Notice of Proposed Rulemaking (EPA, 1996), and the AOC.

This Operations and Monitoring Report (O&M Report) is being prepared in accordance with the Remedial Action Pilot Study Work Plan (Work Plan) and the Remedial Action Pilot Study Performance Monitoring Plan (PMP), which were submitted to EPA in September 2007.

1.1 DOCUMENT OVERVIEW

This O&M Report includes the following main components:

- **Main Text:** This section provides an overview of the operations and maintenance of the system, groundwater elevation data, and groundwater sampling data collected during the first quarter of 2013.
- **Tables:** Tables are included for groundwater elevations (Table 1), depth to groundwater (Table 2), groundwater analytical data (Tables 3A, 3B, 3C, and 4), and non-aqueous phase liquid (NAPL) recovery (Table 5).
- **Figures:** Figures are included showing the Site location and monitoring network (Figures 1 and 2), groundwater elevation information (Figures 3 through 5), polychlorinated

pentachlorophenol (PCP) concentrations in groundwater (Figures 6 through 30), and polynuclear aromatic hydrocarbons ([PAHs] Figure 31).

- **Appendix A: Operations and Monitoring Summary** - This appendix includes a memorandum summarizing operations and maintenance of the Remedial Action Pilot Test system from the period January through March, 2013.
- **Appendix B: Time Series Plots** - PCP and total PAHs in Groundwater - This section provides time series plots showing PCP and PAHs in groundwater for each well.
- **Appendix C: Laboratory Reports** - Groundwater sampling results are provided in this appendix.
- **Appendix D: Quality Assurance Review** - This document provides an assessment of the laboratory data collected and presented in this report.

2.0 OPERATIONS, MAINTENANCE, AND MONITORING

Implementation of the Remedial Action Pilot Test at the former Baxter Arlington facility included installation of a groundwater extraction and re-infiltration field northwest of the source area to treat affected groundwater and installation of a network of monitoring wells and piezometers to monitor the remediation progress. Installation was completed on January 30, 2008, and the system was commissioned on January 31, 2008.

The objective of the Remedial Action Pilot Test is to create conditions favorable for biodegradation of PCP in groundwater by increasing groundwater pH. The system consists of seven extraction wells in a chevron pattern downgradient of an infiltration gallery, also in a chevron pattern (Figure 2). The infiltration gallery is backfilled with crushed limestone. Groundwater extracted through the extraction wells is pumped into the infiltration gallery. The groundwater then comes into contact with the limestone during infiltration, thereby increasing pH. Sorbent socks installed in five monitoring wells absorb light non-aqueous phase liquid (LNAPL).

The requirements for monitoring and maintenance are specified in the Work Plan. Quarterly groundwater level measurements, site visits, and ongoing maintenance are performed as part of the operations and monitoring program for the Remedial Action Pilot Study. Figure 2 shows the locations of the infiltration trench, extraction wells, piping, and monitoring wells.

In July 2010, system monitoring transitioned from monthly to quarterly and operation of extraction well EW-7 was discontinued following approval from the EPA (EPA, 2010). Routine monitoring tasks consist of recording quarterly groundwater level readings from the monitoring well network; inspecting the LNAPL recovery sorbent socks and replacing the saturated socks; collecting a composite groundwater sample from the system extraction wells; and analyzing the composite groundwater sample for PCP and several degradation products.

During the fourth quarter of 2010, five new monitoring wells were added to the network (MW-38 through MW-42). In October 2010, another new monitoring network well (MW-43) was installed. Depth to water was measured at all monitoring network wells during quarterly O&M activities (Figure 2). These newly installed monitoring wells provide additional groundwater elevation data in areas northwest of the Main Treatment Area. As part of quarterly O&M reporting, elevation data from these new wells have been included in the development of facility groundwater contour maps and is used to evaluate vertical groundwater gradients in areas hydraulically downgradient of facility extraction wells.

2.1 OPERATIONS AND MAINTENANCE

The system produced frequent high water alarms during the first quarter of 2013. After a shutdown on January 1st, the pressures at EW-2, 3, and 4 were set to 55 psi, 58 psi, and 85 psi respectively. These pressures correspond to respective flow rates of 5 gpm, 5 gpm, and 14 gpm. The system was restarted on January 3rd, but shut down again on January 4th. The backpressure on EW-4 was increased to 88psi, dropping the flow rate by approximately one gpm, when the well was restarted on January 10th. Another shutdown occurred on January 11th due to a high water alarm.

The system stayed on for 2 days after a restart on January 17th, and then again for 3 days after a system restart on January 25th. During a January 30th system restart, the backpressure at EW-4 was again raised, this time to 90 psi. The system shut down again on February 1st. After two more 1-day restart periods, the system shut down on February 13th and was left off for the rest of the first quarter 2013 while infiltration gallery rehabilitation options were considered.

2.2 GROUNDWATER LEVEL MEASUREMENTS

The First Quarter 2013 groundwater monitoring event was conducted from February 10 through February 12, 2013. Depth-to-groundwater measurements indicated an increase in groundwater elevations for all monitoring wells located at the facility. Table 1 presents a summary of groundwater elevations from February 2012 through February 2013; Table 2 provides the groundwater elevations for the same time period along with the depth-to-groundwater measurements, the total changes in groundwater elevations since installation of the pilot system (excluding MW-38 through MW-43), as well as incremental changes since the previous measurement.

Figure 4 presents the February 2013 groundwater elevation contour map. Figure 5 presents a contour map of groundwater elevation differentials between the baseline elevations (January 28, 2008, prior to the system startup) and elevations measured in February 2013. The differential groundwater elevation contour map was generated by subtracting groundwater elevation measured

during the monitoring event from the baseline groundwater elevation at each well location. An interpolation scheme (kriging) was used to generate the contours based on the differential value at each well.

Appendix A provides additional detailed information related to the system's operation. Appendix A, Figures 4 and 5 show cross-sections of measured and baseline groundwater elevations along two transects for the monitoring event; the transect locations are shown on Appendix A, Figure 2. The cross sections also provide evidence of the direction of vertical hydraulic gradients within well pairs and well triplets.

Wells were assigned one of three different well classifications developed to evaluate vertical gradients at each well cluster:

- Shallow wells - wells with bottom-of-screen elevations higher than 90 feet (ft) above mean sea level ([msl]; North American Vertical Datum of 1988 [NAVD 88]);
- Intermediate wells - wells with bottom-of-screen elevations between 70 and 90 ft msl; and
- Deep wells - wells with bottom-of-screen elevations below 70 ft msl.

A well classification approach using depth below ground surface (bgs) was not used.

The cross section on Appendix A, Figure 5 indicates an upward vertical gradient at the MW-25/MW-32 well pair for the first time during system operation. Minimal vertical head gradients are observed immediately downgradient of the infiltration gallery (MW-3/MW-33) and at the MW-29/MW-34/MW 38 well triplet, which indicates that the gradient observed at MW-25/MW-32 dissipates rapidly in the direction of groundwater flow. Downward vertical gradients were observed at well pairs located downgradient of the EW-1/EW-4 extraction well line (MW-15/MW-40 and MW 37/MW 41). Vertical groundwater gradients for facility well pairs are summarized in Appendix A, Table 3.

Figure 6 in Appendix A provides a trend plot of vertical gradients for six well pairs, where a positive gradient indicates downward groundwater flow and a negative gradient indicates upward flow. With the exception of well pair MW-25/MW-32, the magnitude and direction of vertical gradients at facility well pairs and triplets remained consistent with those observed during the previous quarter (Appendix A: Figure 6; Table 3). The MW-25/MW-32 gradient difference could be a result of system downtime prior to the groundwater monitoring event.

Appendix A Figures 7 through 26 present hydrographs for each well in the groundwater monitoring network, as well as a bar graph of daily precipitation for the corresponding time period. Daily

precipitation data are acquired on a quarterly basis from the National Climatic Data Center (NCDC).

Precipitation data from previous quarters are presented along with the well hydrographs. The NCDC precipitation data set provides cumulative estimates of rainfall and snowmelt; snowfall is not included in the precipitation data. Average daily precipitation for the interval between groundwater monitoring events is shown as a line graph overlying the bar graph. If rainfall totals are missing from the NCDC data set, the omitted data points are treated as zero values on the hydrographs and in the calculation of the average.

The hydrographs indicate a correlation between groundwater elevation and precipitation. For all groundwater monitoring wells, the groundwater elevation increased between the November and February monitoring events. As during previous quarters, the observed fluctuations in groundwater elevations are likely due to variation in precipitation and groundwater recharge during the reporting period.

2.3 GROUNDWATER MONITORING AND WATER QUALITY

In addition to collecting the quarterly groundwater elevation data, a groundwater sampling event was conducted during the first quarter of 2013. The monitoring event was conducted between February 10 and 12, 2013. The sampling event included existing "Site Investigation" wells and the "PMP" wells installed in late 2007, the five wells installed in July 2010 (MW-38 through MW-42), and the well installed in October 2010 (MW-43).

The following wells were sampled as part of the monitoring event:

- **February 10-12, 2013 Event** - 31 wells: BXS-1, BXS-2, MW-2, MW-3, HCMW-7, MW-15 through MW-18, and MW-22 through MW-43 (Figure 2).

Groundwater samples were collected in accordance with the 2005 Site Investigation Work Plan, using low-flow methods and either a dedicated submersible bladder pump (Site Investigation wells) or a portable submersible pump that was decontaminated between each well (PMP wells). Sampling, equipment decontamination, and sample custody procedures were in accordance with previous sampling events conducted at the site. Field groundwater sampling activities were performed by Baxter personnel. Laboratory analyses were completed by Columbia Analytical Services (CAS) of Kelso, Washington. Laboratory analyses performed by CAS included PCP by EPA Method 8151 for all sampled wells, PAHs by EPA Method 8270C on select groundwater samples, and the extraction well composite sample was analyzed for PCP and degradation products using EPA Method 8151.

PCP results for the February 2013 sampling event, as well as sampling conducted since February 2011 are shown on Figure 6 and summarized in Table 3A. PCP isopleth maps for quarterly monitoring events since January 2008 through February 2013 are provided in Figures 7 through 30. The isopleth maps were generated in Surfer™ using an interpolation scheme (kriging) to generate contours based on each well's PCP concentration. Figures 27 through 30 represent PCP isopleths for deeper zones downgradient of the Main Treatment Area for 2011, 2012, and first quarter 2013. Total PAH results are shown on Figure 31 and summarized in Table 3A. Time series plots showing PCP and total PAHs for each well are provided in Appendix B.

In addition to collection of groundwater samples from the monitoring well network, a composite groundwater sample was prepared from discrete samples collected from extraction wells EW-2 through EW-4 during the monitoring event. The composite sample was prepared by combining an equal volume of groundwater from each extraction well using a measuring cup. The composite samples from the extraction wells were analyzed for PCP and, since March 2009, select PCP degradation products. The analytical results for composite samples collected from March 2009 through March 2013 are shown in Table 3B. During this reporting period, the PCP concentration increased to 820 micrograms per liter ([$\mu\text{g}/\text{L}$] estimated) from 690 $\mu\text{g}/\text{L}$ observed in the previous quarter's composite sample. The concentrations of degradation products 2,4,5 trichlorophenol, 2,4,6-trichlorophenol, and total tetrachlorophenols were below method reporting limits.

2.4 LNAPL RECOVERY

The sorbent socks in the five recovery wells were inspected on February 12, 2013, and the sock in MW-12 was replaced. A total mass of 1.97 pounds of LNAPL was removed from recovery well MW-12. The amount of LNAPL removed was determined by subtracting the mass of an unused sock from the mass of the spent sock using a laboratory scale. The socks in recovery wells MW-13, MW-19, MW-20, and MW-21 did not require replacement. Since implementation of the pilot study, the socks in these recovery wells have become saturated with LNAPL less frequently than the sock in MW-12.

The manufacturer's information indicates that each sock is capable of absorbing 2 pounds of product. Baxter coordinated with Stella-Jones (the current operator of the wood-treating facility) to have the spent socks shipped off-site along with waste produced by Stella-Jones as part of facility operations.

2.5 QUALITY ASSURANCE AND QUALITY CONTROL

Level III data validation was conducted on 32 groundwater samples, 2 field duplicates, and 1 field blank collected during the First Quarter 2013. The analyses were performed by CAS, and

validation was performed by AMEC. All results are of acceptable quality and useable for their intended purpose, as documented in the quality assurance memorandum included as Appendix D.

2.6 ACTIVITIES PLANNED FOR 2013

Groundwater monitoring activities will continue in 2013 in accordance with the PMP. These activities included quarterly groundwater elevation monitoring and quarterly water quality monitoring.

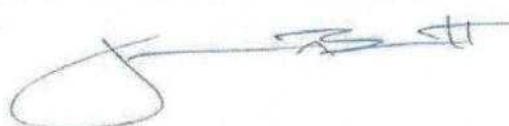
We appreciate the opportunity to serve you on this project. If you have any questions or desire further information, please feel free to contact us at (503) 639-3400.

Sincerely,

AMEC Environment and Infrastructure, Inc. Reviewed by:



Leslie Slasor
Environmental Chemist



J. Stephen Barnett, LHG
Senior Geologist

LS/cw

REFERENCES

EPA, 1994. Resource Conservation and Recovery Act (RCRA) Corrective Action Plan (Final). OSWER Directive 9902.3-2A. May.

EPA, 1996. Federal Register, Vol. 61, No. 85, May 1, p. 19,432.

EPA, 2001. Administrative Order on Consent, U.S. EPA, Region 10 Docket No. RCRA-10-2001-0086, U.S. Environmental Protection Agency.

EPA, 2010. E-mail message from Jan Palumbo, U.S. Environmental Protection Agency, to RueAnn Thomas, J. Stephen Barnett, and Gary Dupuy re: "Summary of 6/24/10 Meeting Agreements," July 19, 2010.

LIMITATIONS

This report was prepared exclusively for J.H. Baxter & Co. and the Environmental Protection Agency (EPA) by AMEC Environment & Infrastructure, Inc. (AMEC). The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This First Quarter 2013 Operations and Monitoring Report - Remedial Action Pilot Study is intended to be used by J.H. Baxter & Co. and the EPA for the Former Wood Treating Facility in Arlington, Washington only. Any other use of, or reliance on, this report by any third party is at that party's sole risk.



TABLES

TABLE 1
GROUNDWATER ELEVATIONS SUMMARY
Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Well Identification	Northing	Easting	Ground Surface Elevation (feet)	Groundwater Elevations (feet) ¹					
				Baseline 1/28/08 ²	2/12/12	4/29/12	8/19/12	11/11/12	2/10/13
BXS-1	427577.0	1320372.8	142.32	--	109.84	113.71	111.76	108.65	115.9
BXS-2	427429.1	1320176.6	141.09	106.63	111.67	115.92	114.02	110.89	117.76
BXS-3	427202.9	1320143.8	141.73	109.82	115.03	119.94	117.43	114.07	122.31
BXS-4	426556.4	1320865.9	143.05	132.10	132.27	133.42	130.07	131.32	134.54
HC-MW-5	427010.1	1320692.3	143.94	120.42	121.22	124.32	120.59	118.95	126.79
HC-MW-6	427887.2	1320815.7	146.69	106.84	110.85	115.36	112.42	111.96	118.13
HC-MW-7	428230.4	1320337.6	145.01	102.67	106.54	110.74	108.81	105.73	112.98
MW-1	427352.2	1320826.9	146.21	124.33	124.59	125.53	122.53	122.64	126.88
MW-2	428166.9	1320647.4	144.69	103.68	107.69	112.1	109.75	106.51	114.65
MW-3	427560.7	1320596.2	143.92	106.87	110.68	114.57	112.28	109.18	116.97
MW-4	425935.6	1321013.3	143.02	135.54	136.24	135.89	132.25	135.15	137.06
MW-10	427175.1	1320566.0	143.30	114.90	118.09	122.73	119.15	115.79	125.18
MW-11	427398.1	1321001.0	146.46	125.74	125.82	126.52	123.44	124.36	127.76
MW-14	425602.6	1320388.9	139.88	119.98	122.83	126.21	121.75	119.20	128.09
MW-15	427860.0	1320310.6	142.78	104.72	108.57	112.64	110.79	107.62	114.69
MW-16	428006.8	1320325.6	143.37	103.91	107.80	111.99	110.16	106.91	114.10
MW-17	427863.6	1320173.9	142.17	104.47	108.30	112.39	110.60	107.45	114.24
MW-18	428312.7	1320075.7	142.79	102.05	105.92	109.95	108.44	105.30	111.82
MW-22	427395.3	1320573.5	143.13	108.72	113.21	116.85	114.73	111.96	118.63
MW-23	427500.0	1320578.2	143.47	107.50	112.07	115.68	113.37	110.53	117.78
MW-24	427563.9	1320645.1	144.47	107.02	110.87	114.78	112.42	109.33	117.03
MW-25	427492.9	1320682.0	145.45	109.06	114.98	118.51	116.27	113.63	117.38
MW-26	427601.0	1320773.0	145.13	107.48	111.20	115.30	112.75	109.55	117.76
MW-27	427677.9	1320702.8	144.62	107.01	110.80	114.86	112.42	109.31	117.31
MW-28	427502.3	1320488.8	143.02	107.01	111.31	115.09	112.86	109.92	117.32
MW-29	427637.7	1320503.0	142.85	106.33	110.18	114.02	111.81	108.79	116.31
MW-30	427836.7	1320483.2	142.64	105.47	109.26	113.4	111.39	108.16	115.55
MW-31	427715.8	1320294.0	141.15	105.23	109.05	113.1	111.16	108.03	115.18
MW-32	427493.5	1320670.2	145.27	107.36	111.16	115.09	112.69	109.58	120.1
MW-33	427577.4	1320602.0	143.76	106.87	110.67	114.61	112.34	109.21	116.95
MW-34	427647.7	1320498.6	143.02	106.29	110.14	113.94	111.75	108.70	116.30
MW-35	427726.8	1320608.7	144.34	106.36	110.27	114.24	111.90	108.89	116.60
MW-36	427676.1	1320399.4	141.57	105.60	109.34	113.5	111.40	108.22	115.65
MW-37	427969.4	1320251.9	142.37	104.16	108.01	112.05	110.35	107.16	114.04
MW-38 ⁶	427653.6	1320491.4	143.36	NA	110.03	113.87	111.77	108.69	116.13

TABLE 1
GROUNDWATER ELEVATIONS SUMMARY
Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Well Identification	Northing	Easting	Ground Surface Elevation (feet)	Groundwater Elevations (feet) ¹					
				Baseline 1/28/08 ²	2/12/12	4/29/12	8/19/12	11/11/12	2/10/13
MW-39 ⁶	427993.1	1320148.9	142.73	NA	107.41	111.44	109.72	106.6	113.31
MW-40 ⁶	427859.5	1320316.6	142.56	NA	108.13	112.33	110.22	107	114.13
MW-41 ⁶	427968.1	1320255.0	142.33	NA	107.65	111.71	109.93	106.81	113.62
MW-42 ⁶	428319.7	1320080.9	142.89	NA	105.78	109.87	108.23	105.13	111.72
MW-43 ⁷	428757.5	1319841.1	141.91	NA	102.83	106.76	105.5 ⁸	102.52	108.11

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
3. May 2011 depth to water measurements at BXS-2, BXS-3, MW-18, MW-26, MW-33, MW-42, and MW-43 recorded on 5/16/11.
4. A suspected incorrect depth to water measurement occurred at MW-15. Therefore, the 2nd Quarter 2011 groundwater elevation at MW-15 was estimated by calculating the average elevation difference between MW-15 and MW-40 for the 3rd Quarter 2010 through the 1st Quarter 2011 and adding the difference to the 2nd Quarter 2011 groundwater elevation measured at MW-40.
5. The groundwater elevation indicated for MW-15 was raised by 1 foot from the value recorded in the field due to a suspected error in field recording.
6. Monitoring wells MW-38 through MW-42 were installed in July 2010.
7. Monitoring well MW-43 was installed in October 2010.
8. Groundwater elevation measure on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Groundwater below level of dedicated pump.
NA = not applicable

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	BXS-1 ^{2,3} - TOC Elevation: 142.65					BXS-2 ³ - TOC Elevation: 142.89					BXS-3 - TOC Elevation: 142.07					BXS-4 - TOC Elevation: 143.42					HC-MW-5 - TOC Elevation: 143.75				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	8:41	Below Pump	--	0	Below Pump	8:22	36.26	0.00	0.00	106.63	8:30	32.25	0.00	0.00	109.82	11:51	11.32	0.00	0.00	132.10	15:15	23.33	0.00	0.00	120.42
2/12/2012	14:16	32.81	--	1.20	109.84	14:18	31.22	5.04	0.78	111.67	14:21	27.04	5.21	0.73	115.03	15:08	11.15	0.17	3.38	132.27	15:26	22.53	0.80	3.42	121.22
4/29/2012	14:16	28.94	--	3.87	113.71	14:18	26.97	9.29	4.25	115.92	14:21	22.13	10.12	4.91	119.94	15:08	10.00	1.32	1.15	133.42	15:26	19.43	3.90	3.10	124.32
8/19/2012	15:18	30.89	--	-1.95	111.76	15:20	28.87	7.39	-1.90	114.02	15:25	24.64	7.61	-2.51	117.43	14:47	13.35	-2.03	-3.35	130.07	14:44	23.16	0.17	-3.73	120.59
11/11/2012	15:32	34.00	--	-3.11	108.65	15:34	32.00	4.26	-3.13	110.89	15:37	28.00	4.25	-3.36	114.07	15:15	12.10	-0.78	1.25	131.32	15:02	24.80	-1.47	-1.64	118.95
2/10/2013	14:20	26.75	--	7.25	115.90	14:22	25.13	11.13	6.87	117.76	14:25	19.76	12.49	8.24	122.31	13:53	8.88	2.44	3.22	134.54	14:08	16.96	6.37	7.84	126.79

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

- = Data point was either not measured or not calculated
ft = feet
TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	HC-MW-6 - TOC Elevation: 146.36					HC-MW-7 - TOC Elevation: 144.73					MW-1 - TOC Elevation: 147.44					MW-2 - TOC Elevation: 145.96					MW-3 ³ - TOC Elevation: 146.13				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	11:05	39.52	0.00	0.00	106.84	14:19	42.06	0.00	0.00	102.67	12:05	23.11	0.00	0.00	124.33	14:23	42.28	0.00	0.00	103.68	10:22	39.26	0.00	0.00	106.87
2/12/2012	15:19	35.51	4.01	1.78	110.85	13:37	38.19	3.87	0.85	106.54	15:23	22.85	0.26	4.31	124.59	14:04	38.27	4.01	1.15	107.69	14:52	35.45	3.81	1.55	110.68
4/29/2012	15:19	31.00	8.52	4.51	115.36	13:37	33.99	8.07	4.20	110.74	15:23	21.91	1.20	0.94	125.53	14:04	33.86	8.42	4.41	112.10	14:52	31.56	7.70	3.89	114.57
8/19/2012	14:18	33.94	5.58	-2.94	112.42	13:17	35.92	6.14	-1.93	108.81	14:40	24.91	-1.80	-3.00	122.53	14:36	36.21	6.07	-2.35	109.75	13:47	33.85	5.41	-2.29	112.28
11/11/2012	14:55	34.40	5.12	-0.46	111.96	13:01	39	3.06	-3.08	105.73	15:00	24.80	-1.69	0.11	122.64	13:42	39.45	2.83	-3.24	106.51	13:51	36.95	2.31	-3.10	109.18
2/10/2013	13:35	28.23	11.29	6.17	118.13	12:37	31.75	10.31	7.25	112.98	13:40	20.56	2.55	4.24	126.88	13:30	31.31	10.97	8.14	114.65	13:05	29.16	10.10	7.79	116.97

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-4 - TOC Elevation: 145.02					MW-10 - TOC Elevation: 144.99					MW-11 - TOC Elevation: 146.06					MW-14 - TOC Elevation: 141.70					MW-15 - TOC Elevation: 142.22				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	11:37	9.48	0.00	0.00	135.54	12:15	30.09	0.00	0.00	114.90	11:59	20.32	0.00	0.00	125.74	11:45	21.72	0.00	0.00	119.98	13:47	37.50	0.00	0.00	104.72
2/12/2012	15:05	8.78	0.70	4.17	136.24	15:30	26.90	3.19	2.25	118.09	15:15	20.24	0.08	8.91	125.82	15:01	18.87	2.85	5.48	122.83	13:44	33.65	3.85	0.93	108.57
4/29/2012	15:05	9.13	0.35	-0.35	135.89	15:30	22.26	7.83	4.64	122.73	15:15	19.54	0.78	0.70	126.52	15:01	15.49	6.23	3.38	126.21	13:44	29.58	7.92	4.07	112.64
8/19/2012	14:50	12.77	-3.29	-3.64	132.25	14:58	25.84	4.25	-3.58	119.15	15:05	22.62	-2.30	-3.08	123.44	14:54	19.95	1.77	-4.46	121.75	13:21	31.43	6.07	-1.85	110.79
11/11/2012	15:07	9.87	-0.39	2.90	135.15	15:21	29.20	0.89	-3.36	115.79	15:17	21.70	-1.38	0.92	124.36	15:11	22.50	-0.78	-2.55	119.20	13:05	34.60	2.90	-3.17	107.62
2/10/2013	14:01	7.96	1.52	1.91	137.06	14:14	19.81	10.28	9.39	125.18	13:42	18.30	2.02	3.40	127.76	14:05	13.61	8.11	8.89	128.09	12:44	27.53	9.97	7.07	114.69

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
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4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

- = Data point was either not measured or not calculated
- ft = feet
- TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-16 - TOC Elevation: 142.91					MW-17 - TOC Elevation: 144.85					MW-18 - TOC Elevation: 142.45					MW-22 - TOC Elevation: 142.75					MW-23 - TOC Elevation: 143.18				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	13:57	39.00	0.00	0.00	103.91	13:52	40.38	0.00	0.00	104.47	14:14	40.40	0.00	0.00	102.05	10:10	34.03	0.00	0.00	108.72	10:02	35.68 ^b	0.00	0.00	107.50
2/12/2012	13:34	35.11	3.89	0.84	107.80	13:41	36.55	3.83	0.80	108.30	14:10	36.53	3.87	0.64	105.92	14:29	29.54	4.49	1.14	113.21	14:26	31.11	4.57	1.44	112.07
4/29/2012	13:34	30.92	8.08	4.19	111.99	13:41	32.46	7.92	4.09	112.39	14:10	32.5	7.90	4.03	109.95	14:29	25.90	8.13	3.64	116.85	14:26	27.50	8.18	3.61	115.68
8/19/2012	13:14	32.75	6.25	-1.83	110.16	13:26	34.25	6.13	-1.79	110.60	14:30	34.01	6.39	-1.51	108.44	13:45	28.02	6.01	-2.12	114.73	13:43	29.81	5.88	-2.31	113.37
11/11/2012	12:58	36	3.00	-3.25	106.91	13:35	37.40	2.98	-3.15	107.45	8:21	37.15	3.25	-3.14	105.30	13:27	30.79	3.24	-2.77	111.96	13:25	32.65	3.03	-2.84	110.53
2/10/2013	12:35	28.81	10.19	7.19	114.10	12:41	30.61	9.77	6.79	114.24	N/A	30.63	9.77	6.52	111.82	14:16	24.12	9.91	6.67	118.63	13:03	25.40	10.28	7.25	117.78

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

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ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-24 - TOC Elevation: 144.13					MW-25 - TOC Elevation: 144.98					MW-26 - TOC Elevation: 144.75					MW-27 - TOC Elevation: 144.31					MW-28 - TOC Elevation: 142.77				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	10:25	37.11	0.00	0.00	107.02	10:28	35.92	0.00	0.00	109.06	10:54	37.27	0.00	0.00	107.48	10:41	37.30	0.00	0.00	107.01	9:47	35.76	0.00	0.00	107.01
2/12/2012	14:56	33.26	3.85	1.58	110.87	14:35	30.00	5.92	0.99	114.98	14:41	33.55	3.72	1.70	111.20	14:44	33.51	3.79	1.52	110.80	14:14	31.46	4.30	1.44	111.31
4/29/2012	14:56	29.35	7.76	3.91	114.78	14:35	26.47	9.45	3.53	118.51	14:41	29.45	7.82	4.10	115.30	14:44	29.45	7.85	4.06	114.86	14:14	27.68	8.08	3.78	115.09
8/19/2012	14:21	31.71	5.40	-2.36	112.42	14:09	28.71	7.21	-2.24	116.27	14:04	32.00	5.27	-2.55	112.75	13:58	31.89	5.41	-2.44	112.42	15:15	29.91	5.85	-2.23	112.86
11/11/2012	13:50	34.80	2.31	-3.09	109.33	13:31	31.35	4.57	-2.64	113.63	14:39	35.20	2.07	-3.20	109.55	13:44	35.00	2.30	-3.11	109.31	15:30	32.85	2.91	-2.94	109.92
2/10/2013	N/A	27.10	10.01	7.70	117.03	13:21	27.60	8.32	3.75	117.38	13:15	26.99	10.28	8.21	117.76	13:13	27.00	10.30	8.00	117.31	14:18	25.45	10.31	7.40	117.32

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
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4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-29 - TOC Elevation: 142.61					MW-30 - TOC Elevation: 142.40					MW-31 - TOC Elevation: 140.95					MW-32 - TOC Elevation: 145.01					MW-33 - TOC Elevation: 143.46				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	14:46	36.28	0.00	0.00	106.33	13:28	36.93	0.00	0.00	105.47	13:42	35.72	0.00	0.00	105.23	10:32	37.65	0.00	0.00	107.36	10:17	36.59	0.00	0.00	106.87
2/12/2012	14:00	32.43	3.85	1.53	110.18	13:52	33.14	3.79	1.11	109.26	13:49	31.90	3.82	1.00	109.05	14:32	33.85	3.80	1.62	111.16	14:50	32.79	3.80	1.54	110.67
4/29/2012	14:00	28.59	7.69	3.84	114.02	13:52	29.00	7.93	4.14	113.40	13:49	27.85	7.87	4.05	113.10	14:32	29.92	7.73	3.93	115.09	14:50	28.85	7.74	3.94	114.61
8/19/2012	13:40	30.80	5.48	-2.21	111.81	13:31	31.01	5.92	-2.01	111.39	13:29	29.79	5.93	-1.94	111.16	14:12	32.32	5.33	-2.40	112.69	13:50	31.12	5.47	-2.27	112.34
11/11/2012	13:21	33.82	2.46	-3.02	108.79	13:14	34.24	2.69	-3.23	108.16	13:10	32.92	2.80	-3.13	108.03	13:29	35.43	2.22	-3.11	109.58	13:49	34.25	2.34	-3.13	109.21
2/10/2013	13:00	26.30	9.98	7.52	116.31	12:52	26.85	10.08	7.39	115.55	12:50	25.77	9.95	7.15	115.18	13:18	24.91	12.74	10.52	120.10	13:06	26.51	10.08	7.74	116.95

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
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5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

— = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-34 - TOC Elevation: 142.60					MW-35 - TOC Elevation: 143.89					MW-36 - TOC Elevation: 141.15					MW-37 - TOC Elevation: 141.96					MW-38 ⁴ - TOC Elevation: 143.28				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	14:51	36.31	0.00	0.00	106.29	11:12	37.53	0.00	0.00	106.36	13:41	35.55	0.00	0.00	105.60	14:05	37.80 ⁶	0.00	0.00	104.16	-	--	--	--	--
2/12/2012	13:57	32.46	3.85	1.52	110.14	14:47	33.62	3.91	1.51	110.27	13:00	31.81	3.74	1.10	109.34	13:27	33.95	3.85	0.87	108.01	13:55	33.25	--	1.45	110.03
4/29/2012	13:57	28.66	7.65	3.80	113.94	14:47	29.65	7.88	3.97	114.24	13:00	27.65	7.90	4.16	113.50	13:27	29.91	7.89	4.04	112.05	13:55	29.41	--	3.84	113.87
8/19/2012	13:38	30.85	5.46	-2.19	111.75	13:55	31.99	5.54	-2.34	111.90	12:45	29.75	5.80	-2.10	111.40	12:58	31.61	6.20	-1.70	110.35	13:35	31.51	--	-2.10	111.77
11/11/2012	13:18	33.90	2.41	-3.05	108.70	13:46	35.00	2.53	-3.01	108.89	12:33	32.93	2.62	-3.18	108.22	12:51	34.8	3.00	-3.19	107.16	13:16	34.59	--	-3.08	108.69
2/10/2013	12:58	26.30	10.01	7.60	116.30	13:08	27.29	10.24	7.71	116.60	12:00	25.50	10.05	7.43	115.65	12:30	27.92	9.88	6.88	114.04	12:55	27.15	--	7.44	116.13

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
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Abbreviations

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ft = feet
TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹
 Former J.H. Baxter & Co. Wood Treating Facility
 Arlington, Washington

Date	MW-39 ⁴ - TOC Elevation: 142.85					MW-40 ⁴ - TOC Elevation: 142.10					MW-41 ⁴ - TOC Elevation: 142.21					MW-42 ⁴ - TOC Elevation: 142.68					MW-43 ⁵ - TOC Elevation: 141.51					
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	
Baseline 1/28/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/12/2012	13:30	35.44	--	0.79	107.41	13:46	33.97	--	1.00	108.13	13:14	34.56	--	0.84	107.65	14:06	36.90	--	0.60	105.78	14:06	38.68	--	0.29	102.83	
4/29/2012	13:30	31.41	--	4.03	111.44	13:46	29.77	--	4.20	112.33	13:14	30.50	--	4.06	111.71	14:06	32.81	--	4.09	109.87	14:06	34.75	--	3.93	106.76	
8/19/2012	13:02	33.13	--	-1.72	109.72	13:24	31.88	--	-2.11	110.22	12:40	32.28	--	-1.78	109.93	14:29	34.45	--	-1.64	108.23	8:53	36.01 ⁷	--	-1.27	105.49	
11/11/2012	12:54	36.25	--	-3.12	106.60	13:07	35.10	--	-3.22	107.00	12:35	35.40	--	-3.12	106.81	8:00	37.55	--	-3.10	105.13	7:45	38.99	--	-2.98	102.52	
2/10/2013	12:32	29.54	--	6.71	113.31	12:47	27.97	--	7.13	114.13	12:02	28.59	--	6.81	113.62	7:40	30.96	--	6.59	111.72	8:30	33.4	--	5.59	108.11	

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benz(b)fluoranthene	Benz(g,h,i)perylene	Benz(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)	
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
2008_01LF	BXS-1	BXS-1	1/9/08	66	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.0067 J	0.005 U	0.0035 U	0.0067	
2008_03	BXS-1	BXS-1	2/26/08	54																			
2008_SI	BXS-1	BXS-1	4/30/08	53	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	ND	
2008_SI	BXS-1	BXS-1	7/29/08	27	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	ND	
2008_SI	BXS-1	BXS-1	10/22/08	26	0.02	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	0.02	
2009_SI	BXS-1	BXS-1	2/10/09	38 J	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	ND	
2009_SI	BXS-1	BXS-1	5/6/09	81	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND	
2009_SI	BXS-1	BXS-1	8/5/09	46	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	ND	
2009_SI	BXS-1	BXS-1	11/18/09	94	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.089 U	0.005 U	0.0035 U	ND	
2010_02SIPMP	BXS-1	BXS-1	2/10/10	77	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.003 J	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.057	0.005 U	0.0035 U	0.06	
2010_05SIPMP	BXS-1	BXS-1	5/26/10	92	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.02 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0045 J	0.0038 U	0.0026 U	0.039 U	0.009 J	0.0037 J	0.0172	
2010_08SIPMP	BXS-1	BXS-1	8/18/10	85	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.072	0.005 U	0.0035 U	0.072	
2010_11SIPMP	BXS-1	BXS-1	11/18/10	73	0.0057 J	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.025 U	0.005 U	0.0035 U	0.0057	
2011_02SIPMP	BXS-1	BXS-1	2/9/11	78 J	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0055 J	0.0072 J	0.01 J	0.015 J	0.008 J	0.0041 J	0.0073 J	0.0044 U	0.0038 U	0.0097 J	0.021 U	0.005 U	0.0035 U	0.0668	
2011_05SIPMP	BXS-1	BXS-1	5/17/11	54	0.02 U	0.0044 U	0.0034 U	0.0076 J	0.02 U	0.0077 J	0.02 U	0.02 U	0.0081 J	0.0062 J	0.0044 U	0.0038 U	0.02 U	0.02 U	0.0063 J	0.0035 U	0.0359		
2011_08SIPMP	BXS-1	BXS-1	8/24/11	84	0.0028 J	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.011 J	0.005 U	0.0035 U	0.0138	
2011_11SIPMP	BXS-1	BXS-1	11/3/11	79	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.066	0.005 U	0.0035 U	0.066	
2012_02SIPMP	BXS-1	BXS-1	2/14/12	78	0.0073 J	0.0057 J	0.02 U	0.0073 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.0054 J	0.0056 J	0.02 U	0.031	0.01 J	0.02 U	0.0723		
2012_05SIPMP	BXS-1	BXS-1	5/2/12	68	0.0076 J	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.026	0.019 U	0.019 U	0.0336	
2012_08SIPMP	BXS-1	BXS-1	8/21/12	70	0.019 U	0.019 U	0.019 U	0.0046 J	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.0146	
2012_11SIPMP	BXS-1	BXS-1	11/13/12	42 J	0.026 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.0063 J	0.019 U	0.024 U	0.011 U	0.019 U	0.0063		
2012_11SIPMP	BXS-1	BXS-5	11/13/12	75 J	0.024 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.0051 J	0.019 U	0.013 U	0.01 U	0.019 U	0.0051		
2013_02SIPMP	BXS-1	BXS-1	2/12/13	56 J	0.0052 J	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.005 J	0.003 J	0.011 J	0.019 U	0.019 U	0.0276		
2013_02SIPMP	BXS-1	BXS-5	2/12/13	60 J	0.0046 J	0.019 U	0.019 U	0.0066 J	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.0227		
2007_SI	BXS-2	BXS-2	2/1/07	0.13 U	0.0092 J	0.0031 U	0.0023 U	0.0039 U	0.0039 U	0.0043 U	0.0046 U	0.0041 U	0.0051 U	0.0053 U	0.0036 U	0.0047 U	0.0036 U	0.0033 U	0.02 U	0.0032 U	0.0047 U	0.0092	
2007_SI	BXS-2	BXS-2	4/18/07	0.13 U	0.02 U	0.0093 J	0.0023 U	0.0039 U	0.0039 U	0.0043 U	0.0046 U	0.0041 U	0.0051 U	0.0053 U	0.0036 U	0.0047 U	0.0045 J	0.0033 U	0.02 U	0.0032 U	0.0047 U	0.0	

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[a]pyrene	Benz[b]fluoranthene	Benz[g,h,i]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)	
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
2008_SI	EW1-EW7	Extra Well 1-7	7/29/08	230																			
2008_SI	EW1-EW7	EW 1-7	10/22/08	170																			
2009_SI	EW1-EW7	EW 1-7	2/11/09	210																			
2009_SI	EW1-EW7	EW 1-7	5/7/09	210																			
2008_SI	HCMW-7	HCMW-7	10/20/08	0.08 U	0.02	0.009 J	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.012 J	0.0092 J	0.0026 U	0.03	0.025	0.0083 J	ND	
2009_SI	HCMW-7	HCMW-7	2/11/09	0.16 U																			
2009_SI	HCMW-7	HCMW-7	5/4/09	0.16 U																			
2009_SI	HCMW-7	HCMW-7	8/3/09	0.16 U																			
2009_SI	HCMW-7	HCMW-7	11/16/09	0.16 U																			
2010_02SIPMP	HCMW-7	HCMW-7	2/8/10	0.16 U																			
2010_05SIPMP	HCMW-7	HCMW-7	5/24/10	0.07 U																			
2010_08SIPMP	HCMW-7	HCMW-7	8/16/10	0.07 U																			
2010_11SIPMP	HCMW-7	HCMW-7	11/15/10	0.07 U																			
2011_02SIPMP	HCMW-7	HCMW-7	2/7/11	0.07 U																			
2011_05SIPMP	HCMW-7	HCMW-7	5/16/11	0.07 U																			
2011_08SIPMP	HCMW-7	HCMW-7	8/23/11	0.12 J																			
2011_11SIPMP	HCMW-7	HCMW-7	11/2/11	0.07 U																			
2012_02SIPMP	HCMW-7	HCMW-7	2/13/12	0.2 U																			
2012_05SIPMP	HCMW-7	HCMW-7	5/1/12	0.50 U																			
2012_08SIPMP	HCMW-7	HCMW-7	8/20/12	0.50 U																			
2012_11SIPMP	HCMW-7	HCMW-7	11/12/12	0.50 U																			
2013_02SIPMP	HCMW-7	HCMW-7	2/11/13	0.5 U																			
2007_SI	MW-2	MW-2	1/31/07	0.13 U	0.0042 U	0.0031 U	0.0023 U	0.0039 U	0.0039 U	0.0043 U	0.0046 U	0.0041 U	0.0051 U	0.0053 U	0.0036 U	0.0047 U	0.0036 U	0.0033 U	0.0065 U	0.0032 U	0.0047 U	ND	
2007_SI	MW-2	MW-2	4/17/07	0.13 U	0.02 U	0.0031 U	0.0023 U	0.0039 U	0.0039 U	0.0043 U	0.0046 U	0.0041 U	0.0051 U	0.0053 U	0.0036 U	0.0047 U	0.0036 U	0.0033 U	0.0065 U	0.02 U	0.0047 U	0.0081	
2007_SI	MW-2	MW-2	7/17/07	0.13 U	0.0025 J	0.0044 U	0.0034 U	0.0056 J	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	0.0103	
2007_SI	MW-2	MW-2	10/9/07	0.08 U	0.0064 J	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.0039 J	0.005 U	0.0035 U	0.0151	
2008_01	MW-2	MW-2	1/8/08	0.08 U	0.0091 J	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.006 J	0.005 U	0.0035 U	ND	
2008_SI	MW-2	MW-2	4/29/08	0.08 U	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND	
2008_SI	MW-2	MW-2	7/29/08	0.08 U	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	0.0048	
2008_SI	MW-2	MW-2	10/21/08	0.08 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0048 J	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	ND	
2009_SI	MW-2	MW-2	2/10/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.003 U	0.005 U	0.0035 U	ND	
2009_SI	MW-2	MW-2	5/5/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND	
2009_SI	MW-2	MW-2	8/4/09	0.16 U	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	ND	
2009_SI	MW-2	MW-2	11/17/09	0.16 U	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.072 U	0.005 U	0.0035 U	0.047	
2010_02SIPMP	MW-2	MW-2	2/9/10	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.047	0.005 U	0.0035 U	ND	
2010_05SIPMP	MW-2	MW-2	5/25/10	0.07 U	0.0023 U	0.0044 U	0.0034 U																

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Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methyl/naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benz(b)fluoranthene	Benz(g,h,i)perylene	Benz(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
2008_SI	MW-3	MW-3	10/21/08	1700	1.2	1	0.22	0.044U	0.0026U	0.0043U	0.0023U	0.0025U	0.0034U	0.0025U	0.0044U	1.5	0.0026U	6	0.039U	0.0035U	ND	
2009_SI	MW-3	MW-3	2/10/09	0.16U	0.0023U	0.044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.02U	0.005U	0.0035U	ND	
2009_SI	MW-3	MW-3	5/5/09	4.4	0.0023U	0.044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.02U	0.005U	0.0035U	0.033	
2009_SI	MW-3	MW-3	8/4/09	1100	0.019U	0.0044U	0.016J	0.017J	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.019U	0.005U	0.0035U	8.5	
2009_SI	MW-3	MW-3	11/17/09	2400	0.86	1.2	0.3	0.04	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	2.2	0.0026U	3.8	0.1	0.0035U	0.095	
2010_02SIPMP	MW-3	MW-3	2/9/10	0.39J	0.02U	0.0044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.095	0.005U	0.0035U	0.0141	
2010_05SIPMP	MW-3	MW-3	5/25/10	0.45	0.0023U	0.044U	0.0034U	0.0042J	0.02U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0058J	0.0038U	0.0026U	0.02U	0.005U	0.0041J	ND	
2010_08SIPMP	MW-3	MW-3	8/17/10	1.6	0.0023U	0.0044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.003U	0.005U	0.0035U	1.749	
2010_11SIPMP	MW-3	MW-3	11/16/10	750	0.2	0.16	0.048	0.011J	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.66	0.0026U	0.56	0.11	0.0035U	0.004	
2011_02SIPMP	MW-3	MW-3	2/8/11	1.6	0.0023U	0.0044U	0.0034U	0.004J	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.02U	0.005U	0.0035U	ND	
2011_05SIPMP	MW-3	MW-3	5/16/11	8.3	0.0023U	0.0044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.033U	0.005U	0.0035U	ND	
2011_08SIPMP	MW-3	MW-3	8/23/11	14	0.02U	0.0044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.02U	0.005U	0.0035U	ND	
2011_11SIPMP	MW-3	MW-3	11/2/11	12	0.0023U	0.0044U	0.0034U	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.034U	0.005U	0.0035U	ND	
2012_02SIPMP	MW-3	MW-3	2/14/12	14	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.062	
2012_05SIPMP	MW-3	MW-3	4/30/12	130	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.062	0.019U	0.019U	0.0834
2012_08SIPMP	MW-3	MW-3	8/20/12	81	0.022U	0.022U	0.022U	0.022U	0.034J	0.022U	0.022U	0.022U	0.022U	0.022U	0.022U	0.022U	0.022U	0.08	0.022U	0.022U	0.028	
2012_11SIPMP	MW-3	MW-3	11/12/12	42	0.023	0.02	0.02	0.02	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.005J	0.02U	0.011U	0.023	
2013_02SIPMP	MW-3	MW-3	2/11/13	110J	0.0039J	0.019U	0.019U	0.0068J	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.019U	0.013J	0.019U	0.019U	ND	
2008_SI	MW-10	MW-10	4/29/08	0.08U																		
2008_SI	MW-10	MW-10	7/29/08	0.08U																		
2007_SI	MW-15	MW-15	2/2/07	270	0.02U	0.0031U	0.0086J	0.0039U	0.0039U	0.0043U	0.0046U	0.0041U	0.0051U	0.0053U	0.0036U	0.0047U	0.0036U	0.0033U	0.33	0.0032U	0.0047U	0.3238
2007_SI	MW-15	MW-15	4/19/07	200	0.02U	0.0031U	0.006J	0.0078J	0.0039U	0.0043U	0.0046U	0.0041U	0.0051U	0.0053U	0.0036U	0.0047U	0.0036U	0.0033U	0.31	0.0032U	0.0047U	0.316
2007_SI	MW-15	MW-15	7/17/07	240	0.01J	0.0044U	0.0084J	0.012J	0.0026U	0.0043U	0.0023U	0.019U	0.0025U	0.0034U	0.0025U	0.0044U	0.0038U	0.019U	0.28	0.0056J	0.0035U	0.2223
2007_SI	MW-15	MW-15	10/9/07	250	0.0068J	0.0044U	0.0055J	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0025U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.21	0.005U	0.0035U	0.4397
2008_01	MW-15	MW-15	1/8/08	200	0.013J	0.0044U	0.0081J	0.0086J	0.0026U	0.0043U	0.0023U	0.0029U	0.0025U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.41	0.005U	0.0035U	0.5287
2008_SI	MW-15	MW-15	4/29/08	200	0.019U	0.0044U	0.0087J	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0025U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.52	0.005U	0.0035U	0.4476
2008_SI	MW-15	MW-15	7/29/08	190	0.019U	0.0044U	0.0076J	0.0036U	0.0026U	0.0043U	0.0023U	0.0029U	0.0025U	0.0034U	0.0025U	0.0044U	0.0038U	0.0026U	0.44	0.005U	0.0035U	0.52
2008_SI	MW-15	MW-15	10/21/08	230	0.019U	0.0044U	0.01J	0.01J	0.002													

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Concentrations of Polycyclic Aromatic Hydrocarbons (µg/L)															Total PAH (calc)																			
				Pentachlorophenol	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benz[b]fluoranthene	Benz[g,h,i]perylene	Benz[k]fluoranthene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Indeno[1,2,3-cd]pyrene	Naphthalene	Phenanthrene	Pyrene																			
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L																			
2009_SI	MW-16	MW-16	8/4/09	0.16	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.02	U	0.0043	U	0.0023	U	0.0025	U	0.0044	U	0.0038	U	0.0026	U	0.003	U	0.005	U	0.0035	U	ND				
2009_SI	MW-16	MW-16	11/16/09	0.16	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.091	U	0.005	U	0.0035	U	0.043		
2010_02SIPMP	MW-16	MW-16	2/8/10	0.16	U	0.02	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.043	U	0.005	U	0.0035	U	0.036
2010_05SIPMP	MW-16	MW-16	5/24/10	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.02	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.036	U	0.005	U	0.0035	U	0.019
2010_08SIPMP	MW-16	MW-16	8/17/10	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.019	J	0.005	U	0.0035	U	ND
2010_11SIPMP	MW-16	MW-16	11/16/10	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.025	U	0.005	U	0.0035	U	ND
2011_02SIPMP	MW-16	MW-16	2/7/11	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.021	U	0.005	U	0.0035	U	ND
2011_05SIPMP	MW-16	MW-16	5/16/11	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.02	U	0.005	U	0.0035	U	ND
2011_08SIPMP	MW-16	MW-16	8/23/11	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.02	U	0.005	U	0.0035	U	ND
2011_11SIPMP	MW-16	MW-16	11/1/11	0.07	U	0.0023	U	0.0044	U	0.0034	U	0.0036	U	0.026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.046	U	0.005	U	0.0035	U	0.048
2012_02SIPMP	MW-16	MW-16	2/13/12	0.2	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.014		
2012_05SIPMP	MW-16	MW-16	4/30/12	0.5	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.004				
2012_08SIPMP	MW-16	MW-16	8/19/12	0.5	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.0097				
2012_11SIPMP	MW-16	MW-16	11/12/12	0.5	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.0097		
2013_02SIPMP	MW-16	MW-16	2/10/13	0.5	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.019	U	0.0097
2007_SI	MW-17	MW-17	2/2/07	0.13	U	0.02	U	0.0031	U	0.0023	U	0.0039	U	0.0043	U	0.0046	U	0.0041	U	0.0051	U	0.0053	U	0.0036	U	0.0033	U	0.02	U	0.02	U	0.047	U	0.004				
2007_SI	MW-17	MW-17	4/17/07	0.13	U	0.02	U	0.0031	U	0.0023	U	0.0039	U	0.0043	U	0.0046	U	0.0041	U	0.0051	U	0.0053	U	0.0036	U	0.0033	U	0.02	U	0.02	U	0.047	U	0.004				
2007_SI	MW-17	MW-17	7/17/07	0.13	U	0.004	J	0.0044	U	0.0034	U	0.0036	U	0.0026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.019	U	0.005	U	0.0035	U	0.0101
2007_SI	MW-17	MW-17	10/9/07	0.08	U	0.0047	J	0.0044	U	0.0034	U	0.0036	U	0.0026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0.0026	U	0.0054	J	0.005	U	0.0035	U	0.0079
2008_01	MW-17	MW-17	1/8/08	0.08	U	0.0043	J	0.0044	U	0.0034	U	0.0036	U	0.0026	U	0.0043	U	0.0023	U	0.0029	U	0.0025	U	0.0034	U	0.0044	U	0.0038	U	0								

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)	
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
2010_11SIPMP	MW-18	MW-18	11/15/10	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND	
2011_02SIPMP	MW-18	MW-18	2/7/11	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND	
2011_05SIPMP	MW-18	MW-18	5/16/11	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.031 U	0.005 U	0.0035 U	ND	
2011_08SIPMP	MW-18	MW-18	8/23/11	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.031 U	0.005 U	0.0035 U	ND	
2011_11SIPMP	MW-18	MW-18	11/2/11	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.047 U	0.005 U	0.0035 U	0.044	
2012_02SIPMP	MW-18	MW-18	2/13/12	0.2 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 J	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.024	0.02 U	0.02 U	0.13	
2012_05SIPMP	MW-18	MW-18	5/1/12	0.5 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.13	0.019 U	0.019 U	0.036	
2012_08SIPMP	MW-18	MW-18	8/20/12	0.5 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.036	0.019 U	0.019 U	ND	
2012_11SIPMP	MW-18	MW-18	11/12/12	0.5 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.014 U	0.019 U	0.019 U	0.021	
2013_02SIPMP	MW-18	MW-18	2/11/13	0.5 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	0.021 J	0.019 U	0.019 U	ND	
2008_01	MW-22	MW-22	1/10/08	130																			
2008_03	MW-22	MW-22	2/27/08	72																			
2008_SI	MW-22	MW-22	4/29/08	92																			
2008_SI	MW-22	MW-22	7/29/08	32																			
2008_SI	MW-22	MW-22	10/21/08	15																			
2009_SI	MW-22	MW-22	2/11/09	5.5																			
2009_SI	MW-22	MW-22	5/5/09	3.6																			
2009_SI	MW-22	MW-22	8/4/09	4.4																			
2009_SI	MW-22	MW-22	11/17/09	5.4																			
2010_02SIPMP	MW-22	MW-22	2/9/10	3.9																			
2010_05SIPMP	MW-22	MW-22	5/25/10	13																			
2010_08SIPMP	MW-22	MW-22	8/18/10	51 J																			
2010_11SIPMP	MW-22	MW-22	11/17/10	98																			
2011_02SIPMP	MW-22	MW-22	2/9/11	130																			
2011_05SIPMP	MW-22	MW-22	5/17/11	150																			
2011_08SIPMP	MW-22	MW-22	8/23/11	220																			
2011_11SIPMP	MW-22	MW-22	11/2/11	230																			
2012_02SIPMP	MW-22	MW-22	2/13/12	300																			
2012_05SIPMP	MW-22	MW-22	4/30/12	280																			
2012_08SIPMP	MW-22	MW-22	8/20/12	280																			
2012_11SIPMP	MW-22	MW-22	11/12/12	250																			
2013_02SIPMP	MW-22	MW-22	2/11/13	180 J																			
2008_01	MW-23	MW-23	1/10/08	500																			
2008_03	MW-23	MW-23	2/27/08	450																			
2008_SI	MW-23	MW-23	4/29/08	210																			
2008_SI	MW-23	MW-23	7/29/08	210																			
2008_SI	MW-23	MW-23	10/21/08	63																			
2009_SI	MW-23	MW-23	2/11/09	170																			
2009_SI	MW-23	MW-23	5/5/09	140																			
2009_SI	MW-23	MW-23	8/4/09	70																			
2009_SI	MW-23	MW-23	11/17/09	8.6																			

TABLE 3A
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Former J.H. Baxter Co. Wood Treating Facility
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Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benz(b)fluoranthene	Benz(g,h,i)perylene	Benz(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)	
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
2008_03	MW-29	MW-29	2/26/08	730																			
2008_SI	MW-29	MW-29	4/28/08	0.08 U																			
2008_SI	MW-29	MW-29	7/28/08	0.08 U																			
2008_SI	MW-29	MW-29	10/20/08	7.5																			
2009_SI	MW-29	MW-29	2/11/09	0.16 U																			
2009_SI	MW-29	MW-29	5/5/09	0.16 U																			
2009_SI	MW-29	MW-29	8/4/09	0.16 U																			
2009_SI	MW-29	MW-29	11/17/09	0.16 U																			
2010_02SIPMP	MW-29	MW-29	2/9/10	0.16 U																			
2010_05SIPMP	MW-29	MW-29	5/24/10	0.07 U																			
2010_08SIPMP	MW-29	MW-29	8/17/10	0.099 J																			
2010_11SIPMP	MW-29	MW-29	11/17/10	0.087 J																			
2011_02SIPMP	MW-29	MW-29	2/8/11	0.07 U																			
2011_05SIPMP	MW-29	MW-29	5/17/11	0.12 J																			
2011_08SIPMP	MW-29	MW-29	8/23/11	0.11 J																			
2011_11SIPMP	MW-29	MW-29	11/2/11	0.23 J																			
2012_02SIPMP	MW-29	MW-29	2/13/12	0.32																			
2012_05SIPMP	MW-29	MW-29	4/30/12	0.5 U																			
2012_08SIPMP	MW-29	MW-29	8/20/12	0.22 J																			
2012_11SIPMP	MW-29	MW-29	11/12/12	2																			
2013_02SIPMP	MW-29	MW-29	2/11/13	16 J																			
2008_01	MW-30	MW-30	1/10/08	0.08 U																			
2008_03	MW-30	MW-30	2/26/08	0.18 J																			
2008_SI	MW-30	MW-30	4/28/08	0.08 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	0.007	
2008_SI	MW-30	MW-30	7/28/08	0.08 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0037 J	0.0206	
2008_SI	MW-30	MW-30	10/21/08	0.08 U	0.019 U	0.0086 J	0.0034 U	0.0036 U	0.0034 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 J	0.019 U	0.0026 U	0.026 U	0.024 U	0.0042 J	ND	
2009_SI	MW-30	MW-30	2/11/09	0.16 U	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.019 U	0.005 U	0.0035 U	0.0126	
2009_SI	MW-30	MW-30	5/4/09	0.16 U	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0028 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 J	0.0026 U	0.05 U	0.0054 J	0.0035 U	ND		
2009_SI	MW-30	MW-30	8/3/09	0.16 U	0.019 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.024 U	0.005 U	0.0035 U	ND	
2009_SI	MW-30	MW-30	11/16/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.011 U	0.005 U	0.0035 U	0.039	
2010_02SIPMP	MW-30	MW-30	2/8/10	0.16 U	0.0042 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0091 U	0.0038 U	0.0026 U	0.039	0.005 U	0.0035 U	0.0328	
2010_05SIPMP	MW-30	MW-30	5/24/10	0.07 U	0.0064 J	0.0044 U	0.0034 U	0.0036 U	0.019 U	0.0043 U	0.0023 U	0.0049 J	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0043 J	0.013 J	0.005 U	0.0042 J	0.031	
2010_08SIPMP	MW-30	MW-30	8/17/10	0.12 J	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.031	0.005 U	0.0035 U	0.072	
2010_11SIPMP	MW-30	MW-30	11/16/10	0.07 U	0.043 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.072	0.005 U	0.0035 U	0.0032	
2011_02SIPMP	MW-30	MW-30	2/8/11	0.14 J	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0032 J	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.021 U	0.005 U	0.0035 U	ND	
2011_05SIPMP	MW-30	MW-30	5/16/11	0.07 U	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND	
2011_08SIPMP	MW-30	MW-30	8/23/11</																				

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benz(b)fluoranthene	Benz(g,h,i)perylene	Benz(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)		
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L		
2008_03	MW-34	MW-34	2/26/08	1900																				
2008_SI	MW-34	MW-34	4/28/08	320																				
2008_SI	MW-34	MW-34	7/28/08	39																				
2008_SI	MW-34	MW-34	10/20/08	270																				
2009_SI	MW-34	MW-34	2/11/09	0.16 U																				
2009_SI	MW-34	MW-34	5/5/09	0.16 U																				
2009_SI	MW-34	MW-34	8/4/09	23																				
2009_SI	MW-34	MW-34	11/17/09	9																				
2010_02SIPMP	MW-34	MW-34	2/9/10	0.28 J																				
2010_05SIPMP	MW-34	MW-34	5/24/10	0.2 J																				
2010_08SIPMP	MW-34	MW-34	8/17/10	250																				
2010_11SIPMP	MW-34	MW-34	11/16/10	3																				
2011_02SIPMP	MW-34	MW-34	2/8/11	0.07 U																				
2011_05SIPMP	MW-34	MW-34	5/17/11	50																				
2011_08SIPMP	MW-34	MW-34	8/23/11	0.07 U																				
2011_11SIPMP	MW-34	MW-34	11/2/11	2																				
2012_02SIPMP	MW-34	MW-34	2/13/12	59																				
2012_05SIPMP	MW-34	MW-34	4/30/12	820																				
2012_08SIPMP	MW-34	MW-34	8/19/12	12 U																				
2012_11SIPMP	MW-34	MW-34	11/12/12	220																				
2013_02SIPMP	MW-34	MW-34	2/11/13	590 J																				
2008_01	MW-35	MW-35	1/8/08	0.08 U	0.0026 J	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.0077 J	0.005 U	0.0035 U	ND		
2008_SI	MW-35	MW-35	4/29/08	0.08 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND		
2008_SI	MW-35	MW-35	7/29/08	0.08 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.003 U	0.005 U	0.0035 U	ND		
2008_SI	MW-35	MW-35	10/21/08	0.08 U																				
2009_SI	MW-35	MW-35	2/10/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.003 U	0.005 U	0.0035 U	ND		
2009_SI	MW-35	MW-35	5/5/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.003 U	0.005 U	0.0035 U	ND		
2009_SI	MW-35	MW-35	8/4/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.047 U	0.005 U	0.0035 U	ND		
2009_SI	MW-35	MW-35	11/17/09	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.1 U	0.005 U	0.0035 U	0.039		
2010_02SIPMP	MW-35	MW-35	2/9/10	0.16 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.039	0.005 U	0.0035 U	0.052		
2010_05SIPMP	MW-35	MW-35	5/25/10	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.052	0.005 U	0.0035 U	0.065		
2010_08SIPMP	MW-35	MW-35	8/18/10	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.065	0.005 U	0.0035 U	ND		
2010_11SIPMP	MW-35	MW-35	11/17/10	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.021 U	0.005 U	0.0035 U	ND		
2011_02SIPMP	MW-35	MW-35	2/9/11	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.02 U	0.005 U	0.0035 U	ND		
2011_05SIPMP	MW-35	MW-35	5/16/11	0.07 U	0.0023 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.023 U	0.005 U	0.0035 U	ND		
2011_08SIPMP	MW-35	MW-35	8/23/11	0.07 U	0.0023 U	0.0																		

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

TABLE 3A
Summary of Groundwater Sampling Analytical Results - 2007 through First Quarter 2013
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Event	Station ID	Sample ID	Sample Date	Pentachlorophenol	2-Methylnaphthalene	Acenaphthylene	Acenaphthene	Anthracene	Benz(a)anthracene	Benz(a)pyrene	Benz(b)fluoranthene	Benz(g,h,i)perylene	Benz(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	Total PAH (calc)	
				µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
2011_05SIPMP	MW-40	MW-40	5/16/11	420																			
2011_08SIPMP	MW-40	MW-40	8/22/11	400																			
2011_11SIPMP	MW-40	MW-40	11/1/11	210																			
2012_02SIPMP	MW-40	MW-40	2/12/12	160																			
2012_05SIPMP	MW-40	MW-40	4/29/12	220 J																			
2012_08SIPMP	MW-40	MW-40	8/19/12	410																			
2012_11SIPMP	MW-40	MW-40	11/11/12	200																			
2013_02SIPMP	MW-40	MW-40	2/10/13	180 J																			
2010_08SIPMP	MW-41	MW-41	8/17/10	420																			
2010_11SIPMP	MW-41	MW-41	11/16/10	300																			
2011_02SIPMP	MW-41	MW-41	2/8/11	240																			
2011_05SIPMP	MW-41	MW-41	5/15/11	110																			
2011_08SIPMP	MW-41	MW-41	8/22/11	300																			
2011_11SIPMP	MW-41	MW-41	11/1/11	340																			
2012_02SIPMP	MW-41	MW-41	2/12/12	220																			
2012_05SIPMP	MW-41	MW-41	4/29/12	110 J																			
2012_08SIPMP	MW-41	MW-41	8/19/12	200																			
2012_11SIPMP	MW-41	MW-41	11/11/12	220																			
2013_02SIPMP	MW-41	MW-41	2/10/13	49 J																			
2010_08SIPMP	MW-42	MW-42	8/16/10	1.2																			ND
2010_11SIPMP	MW-42	MW-42	11/15/10	1.2	0.02 U	0.0044 U	0.0034 U	0.0036 U	0.0026 U	0.0043 U	0.0023 U	0.0029 U	0.0025 U	0.0034 U	0.0025 U	0.0044 U	0.0038 U	0.0026 U	0.04 U	0.005 U	0.0035 U	ND	
2011_02SIPMP	MW-42	MW-42	2/7/11	2.2																			
2011_05SIPMP	MW-42	MW-42	5/16/11	14																			
2011_08SIPMP	MW-42	MW-42	8/23/11	17																			
2011_11SIPMP	MW-42	MW-42	11/2/11	11																			
2012_02SIPMP	MW-42	MW-42	2/13/12	0.071 NJ																			
2012_05SIPMP	MW-42	MW-42	5/1/12	0.5 U																			
2012_08SIPMP	MW-42	MW-42	8/20/12	12																			
2012_11SIPMP	MW-42	MW-42	11/12/12	13																			
2013_02SIPMP	MW-42	MW-42	2/11/13	44 J																			
2010_11SIPMP	MW-43	MW-43	11/15/10	0.07 U																			
2011_02SIPMP	MW-43	MW-43	2/8/11	0.078 J																			
2011_05SIPMP	MW-43	MW-43	5/16/11	0.13 J																			
2011_08SIPMP	MW-43	MW-43	8/23/11	0.07 U																			
2011_11SIPMP	MW-43	MW-43	11/2/11	0.07 U																			
2012_02SIPMP	MW-43	MW-43	2/13/12	0.099 NJ																			
2012_05SIPMP	MW-43	MW-43	5/3/12	0.5 U																			
2012_08SIPMP	MW-43	MW-43	8/20/12	0.5 U																			
2012_11SIPMP	MW-43	MW-43	11/13/12	0.5 U																			
2013_02SIPMP	MW-43	MW-43	2/11/13	0.5 U																			

Notes:

µg/L = micrograms per liter

U = undetected at the detection limit shown

J = estimated value

ND = not detected

NJ = The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

i = The MRL/MDL is elevated due to a chromatographic interference

TABLE 3B
Analytical Results for Pentachlorophenol and Breakdown Products from Extraction Well Composite Samples
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Sample ID	Sample Date	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	2,3,4,6-Tetrachloro-phenol	2,3,5,6-Tetrachloro-phenol	Total Tetrachlorophenols	3,4-Dichlorophenol	3,5-Dichlorophenol	Pentachloro-phenol	Comment
		8270C SIM µg/L	8270C SIM µg/L	8270C SIM µg/L	8270C SIM µg/L	8151M µg/L	8151M µg/L	8151M µg/L	8151A µg/L	
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
EWCOMP030509	3/5/2009	1.0 U	1.0 U	15.0	2.0				430	
EWCOMP040209	4/2/2009	1.0 U	1.0 U	15.0	2.5				180	
EWCOMP052609	5/26/2009	1.1 U	1.1 U	12.0	2.0				240	
EWCOMP070709	7/7/2009	1.0 U	1.0 U	9.1	1.2				190	
EW-1-EW-7	8/5/2009	0.98 U	0.98 U	8.9	1.3				240	PCP from Method 8270D
EWCOMP082709	8/27/2009	1.0 U	1.0 U	7.1	1.0				180	
EWCOMP093009	9/30/2009	1.0 U	1.0 U	9.4	1.4				230	EW 1- EW 6 only
EW-1-EW-6	11/19/2009	0.96 U	0.96 U	10.0	1.9				450	EW 1- EW 6 only; analysis by 8270D SIM
EWCOMP122809	12/28/2009	1.0 U	1.0 U	15.0	1.8				490	EW 1- EW 6 only; analysis by 8270D SIM
EWCOMP12610	1/26/2010	0.99 U	0.99 U	16.0	1.8				470	EW 1- EW 6 only; analysis by 8270D SIM
EW1-7	2/11/2010	1.1 U	1.1 U	8.9	1.2				270	Analysis by 8270D SIM
EWCOMP32410	3/24/2010	1.0 U	1.0 U	13.0	1.6				340	Analysis by 8270D SIM
EWCOMP42910	4/30/2010	1.1 U	1.1 U	11.0	1.4				320	Analysis by 8270D
EW1-7	5/27/2010	0.96 U	0.96 U	5.2	1.0				110	Analysis by 8270D
EWCOMP63010	6/30/2010	1.1 U	1.1 U	11.0	1.8				320	EW1-EW3 & EW5-EW7, Analysis by 8270D SIM
EW1-7	8/19/2010	0.95 U	0.95 U	13.0	2.0				300	Analysis by 8270D
EW1-6	12/7/2010	0.97 U	0.97 U	9.5	1.5				540	Analysis by 8270D
Extraction Well Composite	2/12/2011	0.96 U	0.96 U	32.0	10.0				560	EW 1- EW 6 only; Analysis by 8270D
EW1-4 Composite	5/18/2011	0.099 U	0.06 J			12 U	0.5 U	0.74 U	320	EW 1- EW 4 only; Analysis by 8151M
EW1-4	8/25/2011	0.099 U	0.13 J			28			710	EW 1- EW 4 only; Analysis by 8151M
EW1-4	11/3/2011	0.099 U	0.11 J			33 U			710	EW 1- EW 4 only; Analysis by 8151M
EW1-4	2/14/2012	0.099 U	0.11 J			19 U	1 i		650	EW 1- EW 4 only; Analysis by 8151M
EW1-4	5/3/2012	1.000 U	0.16 NJ			39 J			770	EW 1- EW 4 only; Analysis by 8151M
EW2-4 COMP	8/20/2012	1.000 U	0.50 U			26 U			550	EW 2- EW 4 only; Analysis by 8151M
EW 1-4 COMP	11/12/2012	1.0 U	0.50 U			27 U			690	EW 2- EW 4 only; Analysis by 8151M
EW 1-4 COMP	2/11/2013	1.0 U	0.5 U			39 U			820 J	EW 2- EW 4 only; Analysis by 8151M

Notes:

µg/L = micrograms per liter

D = The reported result is from a dilution

U = Undetected above the listed detection limit

NJ = The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

i = The MRL/MDL is elevated due to a chromatographic interference

J = Estimated value between PQL and MDL

TABLE 3C
Analytical Results for Pentachlorophenol and Breakdown Products from Extraction Well Samples
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Sample ID	Sample Date	2,4,5-Trichloro-phenol	2,4,6-Trichloro-phenol	2,3,4,6-Tetrachloro-phenol	2,3,5,6-Tetrachloro-phenol	Pentachloro-phenol
		8270D SIM µg/L	8270D SIM µg/L	8270D SIM µg/L	8270D SIM µg/L	8270D SIM µg/L
EW-1	2/11/2010	1.0 U	1.0 U	7.5	2.4	200
EW-2	2/11/2010	1.0 U	1.0 U	30	4.6	640
EW-3	2/11/2010	1.0 U	1.0 U	40	4.2	1400
EW-4	2/11/2010	1.0 U	1.0 U	5.7	1.0 U	450
EW-5	2/11/2010	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
EW-6	2/11/2010	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
EW-7	2/11/2010	1.0 U	1.0 U	1.0 U	1.0 U	5.2 U

Notes:

µg/L = micrograms per liter

U = Undetected above the listed detection limit

TABLE 4
Bacteriological Analysis Results for Heterotrophic Plate Count
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

Sample ID	Sample Date	Heterotrophic Plate Count SM 9215B CFU/mL	Comment
EW 1-7	5/25/2010	1	Analyzed by Spectra Laboratories, Tacoma, WA
MW-3	5/25/2010	ND	Analyzed by Spectra Laboratories, Tacoma, WA
MW-3	11/16/2010	1 U	Analyzed by Edge Analytical Laboratories, Burlington, WA
EW 1-6	12/7/2010	95	Analyzed by Edge Analytical Laboratories, Burlington, WA

Notes:

CFU/mL = Colony forming units per milliliter

ND = Not detected

U = Undetected above the listed detection limit

TABLE 5
Light Non-aqueous Phase Liquid (LNAPL) Recovery
Former J.H. Baxter Co. Wood Treating Facility
Arlington, Washington

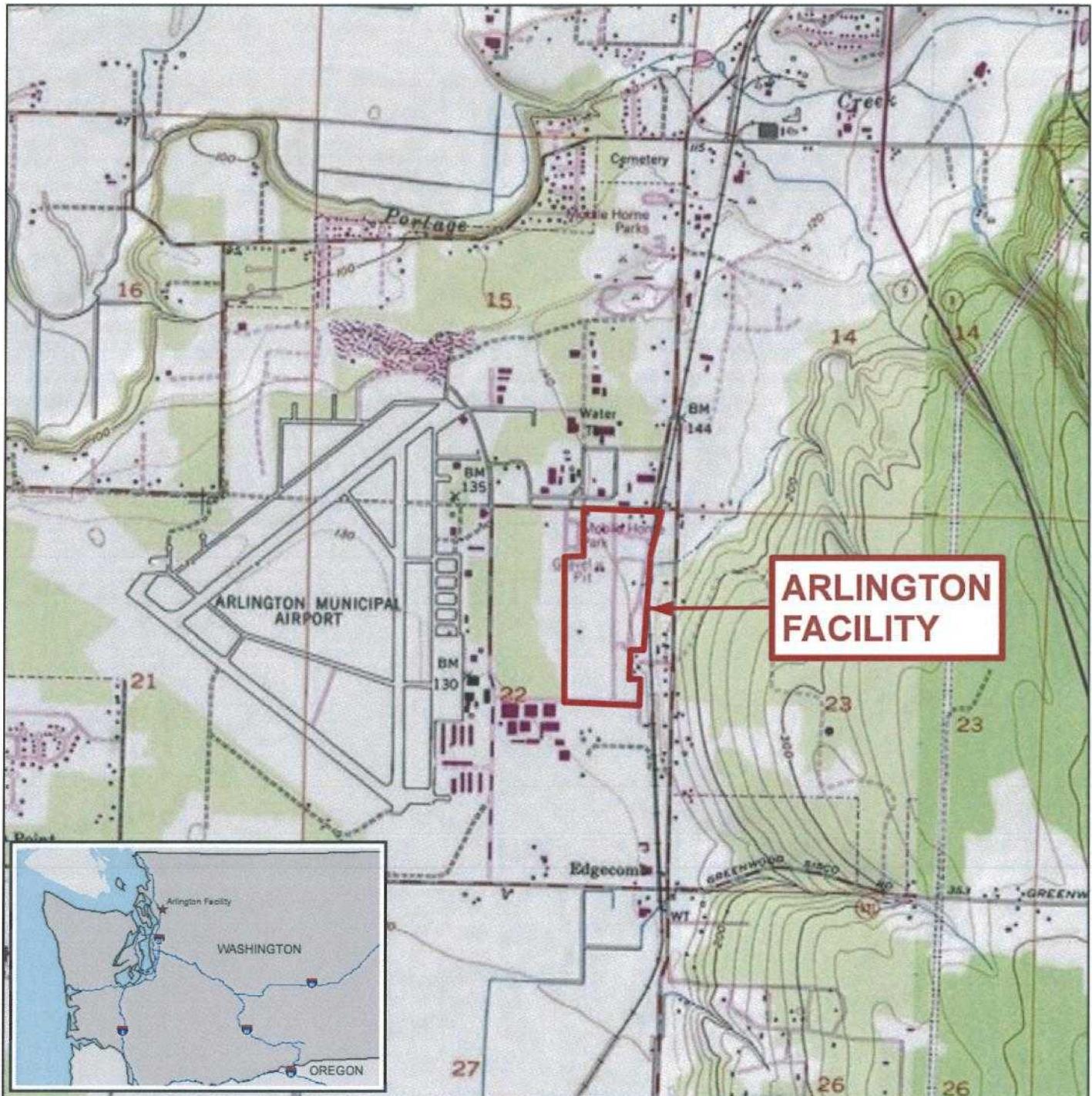
Date	Well ID	Weight (lbs)			Volume (Gallons)
		Total	Material	LNAPL	
4/7/2008	MW-12	2.24	0.53	1.71	0.20
6/2/2008	MW-12	2.34	0.53	1.81	0.22
7/28/2008	MW-12	2.14	0.54	1.60	0.19
9/26/2008	MW-12	1.90	0.46	1.44	0.17
11/24/2008	MW-12	2.22	0.54	1.68	0.20
1/7/2009	MW-13	2.12	0.56	1.56	0.19
3/5/2009	MW-12	2.35	0.64	1.71	0.20
4/1/2009	MW-12	2.58	0.64	1.94	0.23
5/27/2009	MW-12	2.76	0.68	2.08	0.25
11/19/2009	MW-12	NA	NA	1.82	0.22
12/28/2009	MW-12	2.64	0.66	1.98	0.24
1/25/2010	MW-12	2.48	0.64	1.84	0.22
3/23/2010	MW-12	2.6	0.66	1.94	0.23
4/28/2010	MW-12	2.68	0.64	2.04	0.24
6/29/2010	MW-12	2.52	0.64	1.88	0.22
10/19/2010	MW-13	1.49	0.64	0.85	0.10
10/19/2010	MW-12	1.8	0.64	1.16	0.14
2/10/2011	MW-12	2.19	0.56	1.63	0.19
5/18/2011	MW-12	2.56	0.64	1.92	0.23
5/18/2011	MW-13	1.9	0.45	1.45	0.17
5/18/2011	MW-19	1.8	0.63	1.17	0.14
5/18/2011	MW-21	1.59	0.58	1.01	0.12
8/24/2011	MW-12	2.07	0.63	1.44	0.17
11/3/2011	MW-12	2.27	0.61	1.66	0.20
2/15/2012	MW-12	1.89	0.64	1.25	0.15
5/2/2012	MW-12	2.45	0.64	1.81	0.22
8/20/2012	MW-12	1.08	0.47	0.61	0.07
11/13/2012	MW-12	NC	NC	0.00	0.00
2/12/2013	MW-12	2.38	0.41	1.97	0.23
TOTAL				44.96	5.36

Notes:

NC - No Change, water level low



FIGURES



0 1,000 2,000 4,000
Feet



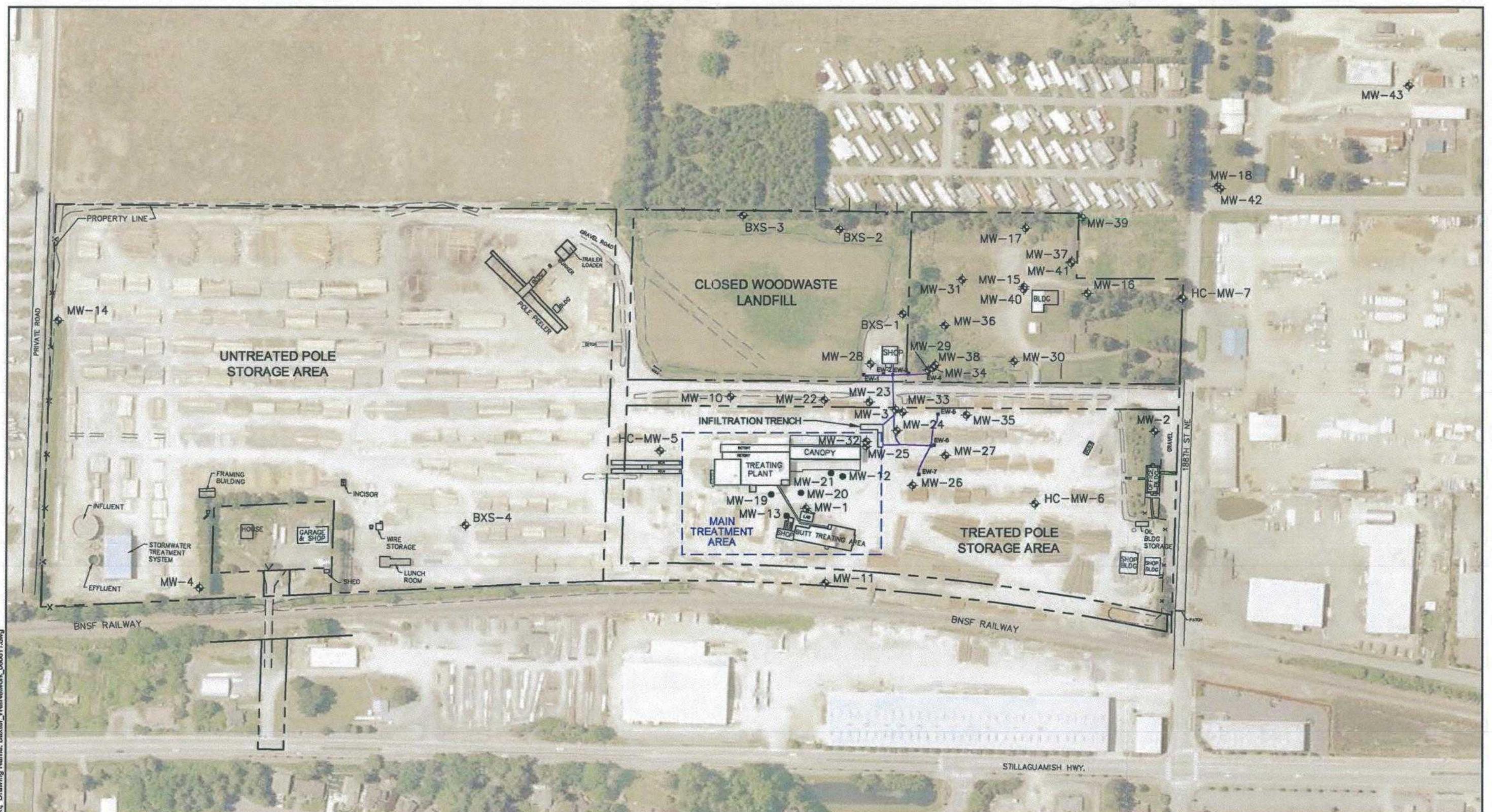
AMEC
7376 SW Durham Road
Portland, OR, U.S.A. 97224



CLIENT:
J.H. BAXTER



TITLE: SITE VICINITY MAP		DWN BY: PM	DATUM: NAD83	DATE: MAY 2013
PROJECT: FORMER J.H. BAXTER AND CO. WOOD TREATING FACILITY ARLINGTON, WA		CHK'D BY: SB	REV. NO.: 1	PROJECT NO.: 161M125610
		PROJECTION: WA SP N. Ft.	SCALE: 1 inch = 2,000 feet	FIGURE No.: 1

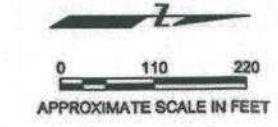


Plot Date: 08/08/11 - 2:59pm, Plotted by: adam.stenberg
Drawing Path: S:\12706014_WellNetwork_080811.dwg

AERIAL: MAY 2009, GOOGLE

LEGEND

- MW-1 ◊ MONITORING WELL
- MW-12 ● LNAPL RECOVERY WELL
- EW-1 ■ EXTRACTION WELL AND VAULT IDENTIFYING NUMBER
- APPROXIMATE SITE BOUNDARY
- LAYOUT OF GROUNDWATER RECIRCULATION PIPING

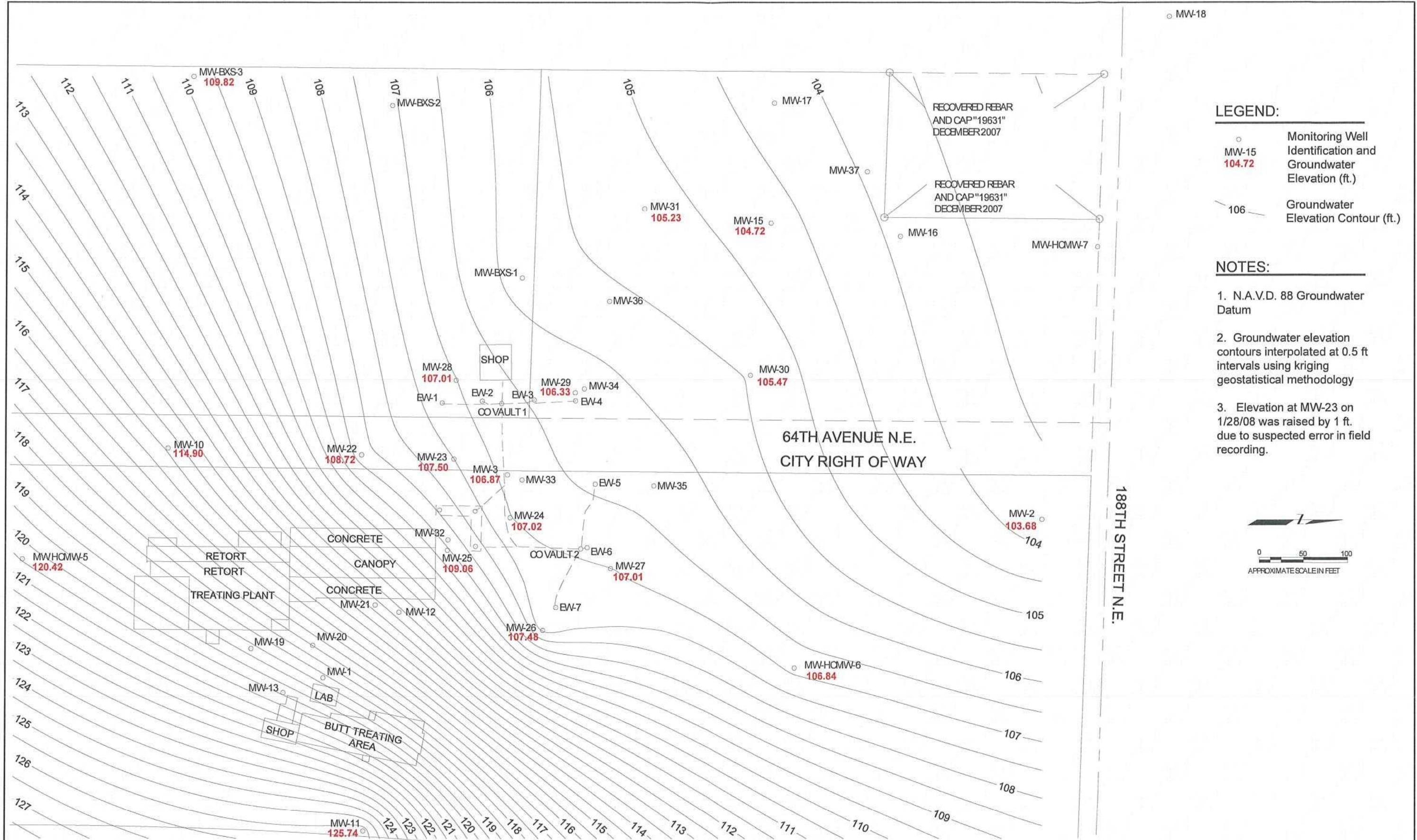


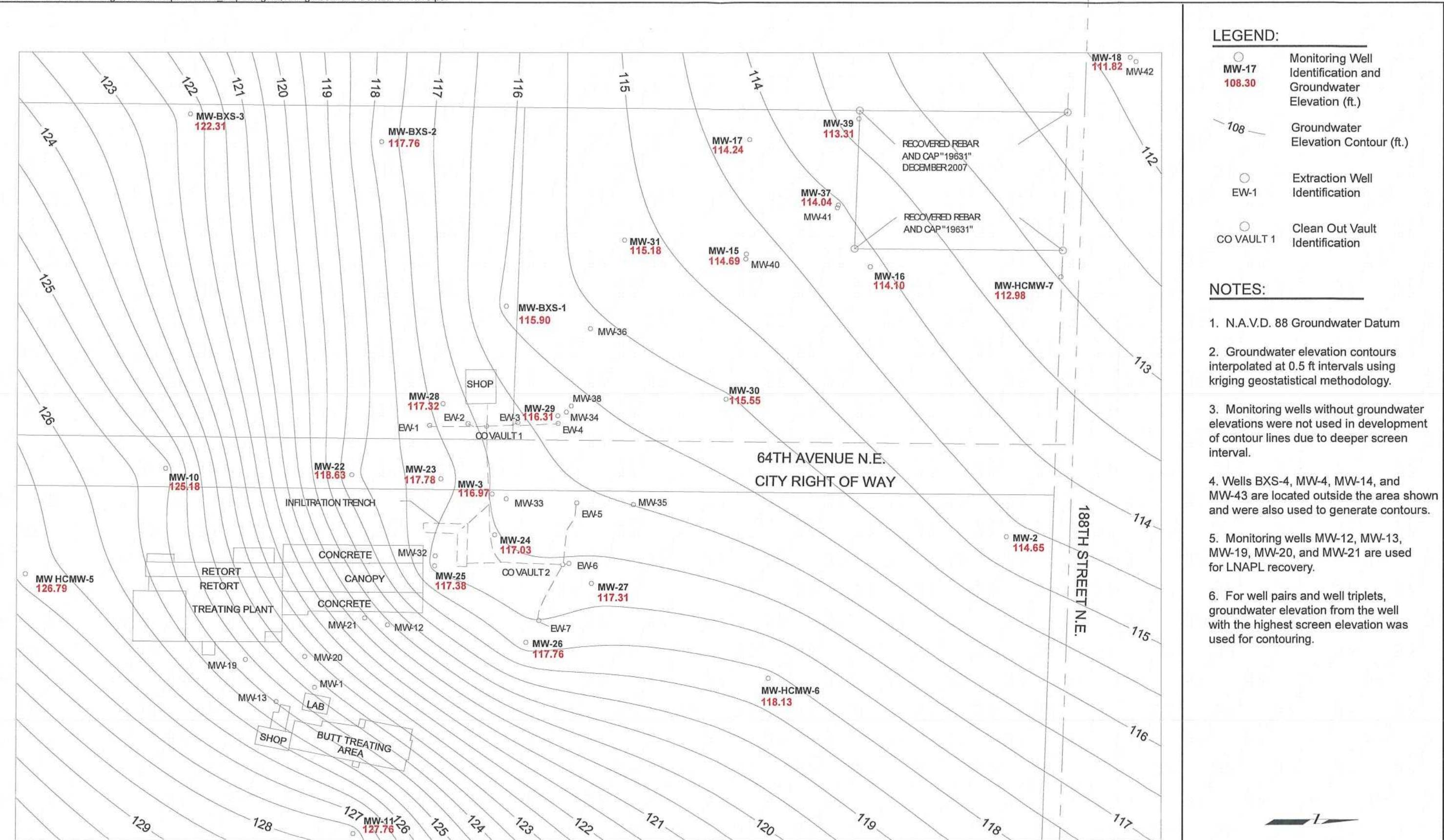
GROUNDWATER MONITORING NETWORK
Former J.H. Baxter and Co. Wood Treating Facility
Arlington, Washington

By: APS Date: 08/08/11 Project No. 0127060010

amec

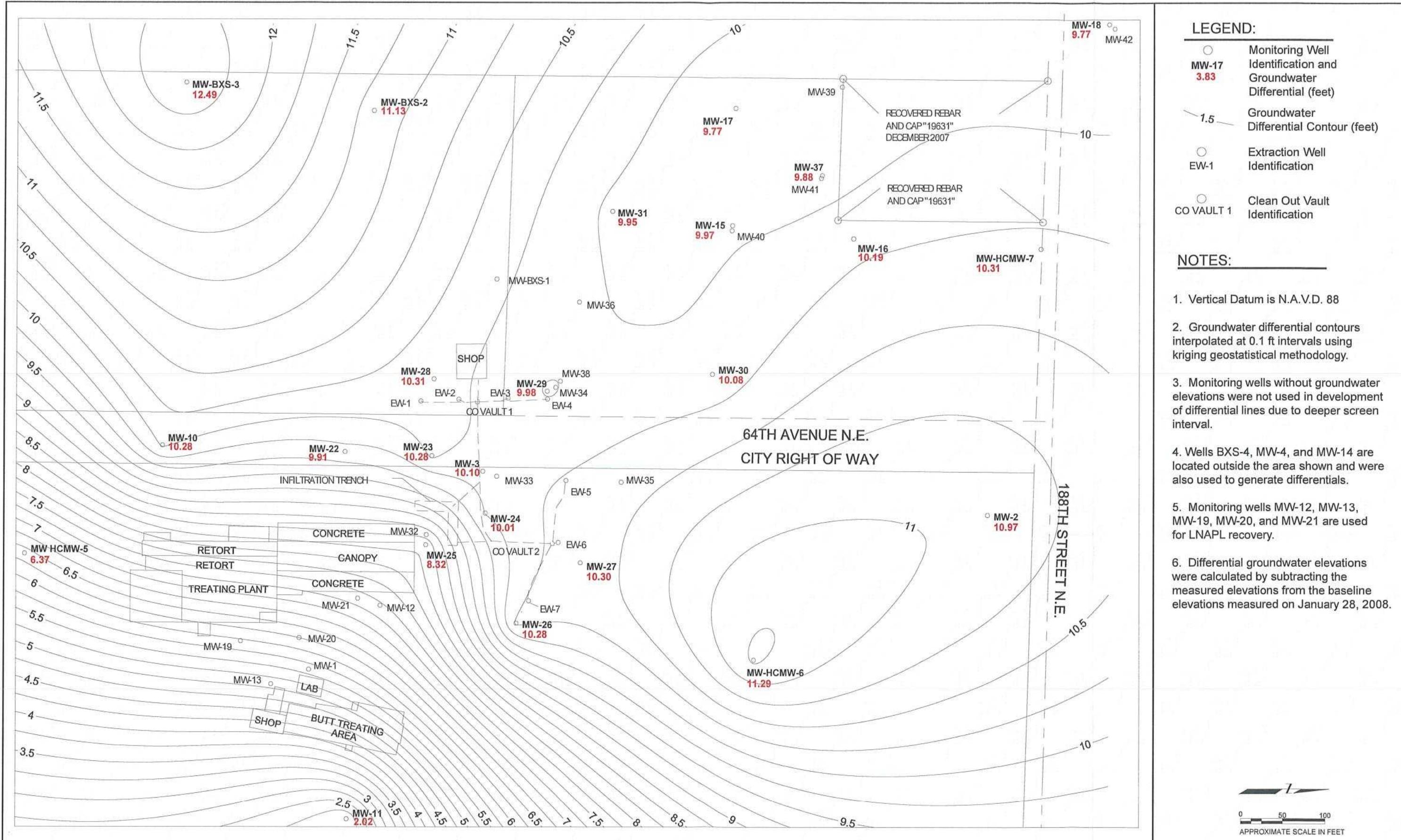
Figure 2

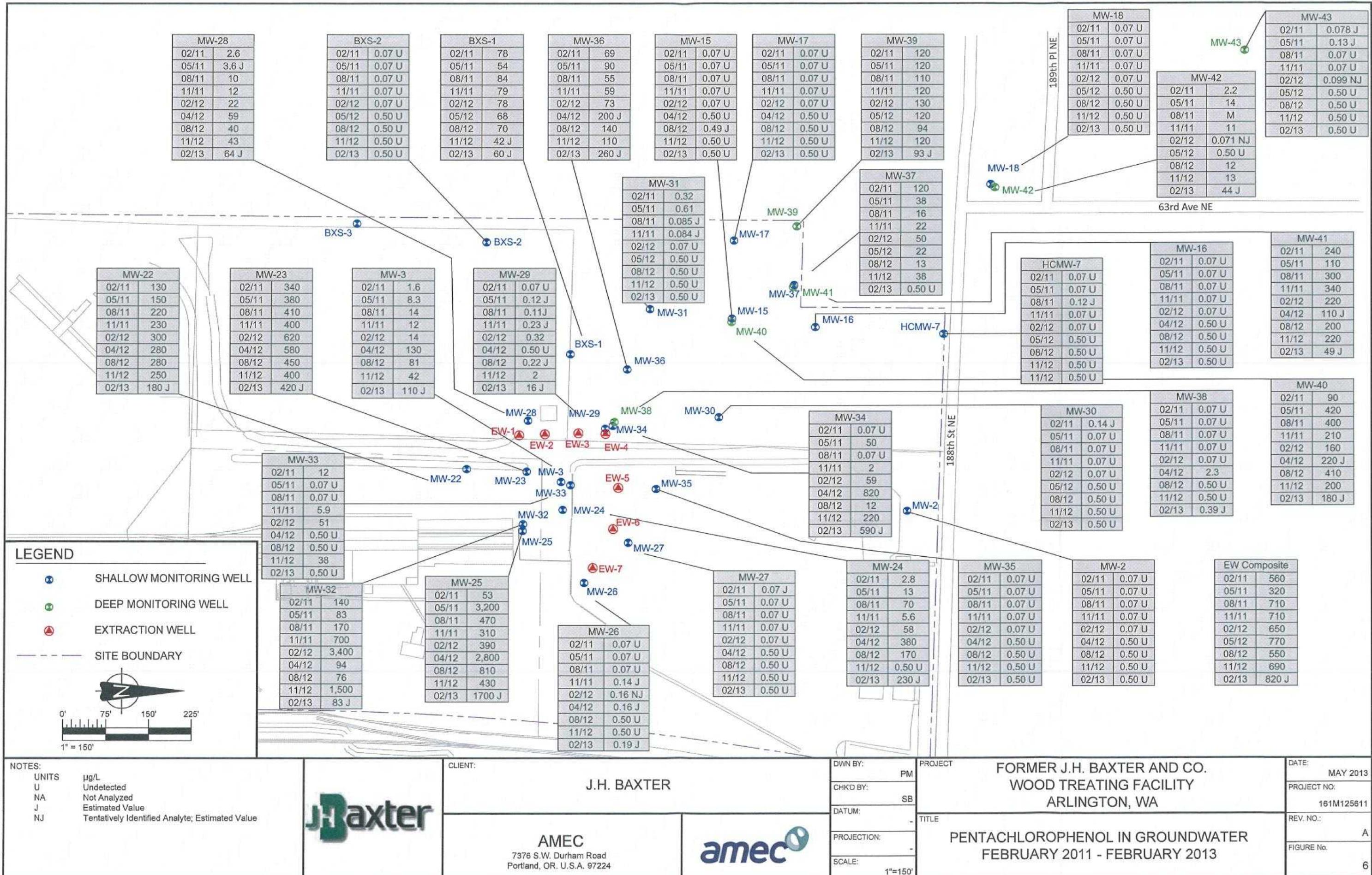


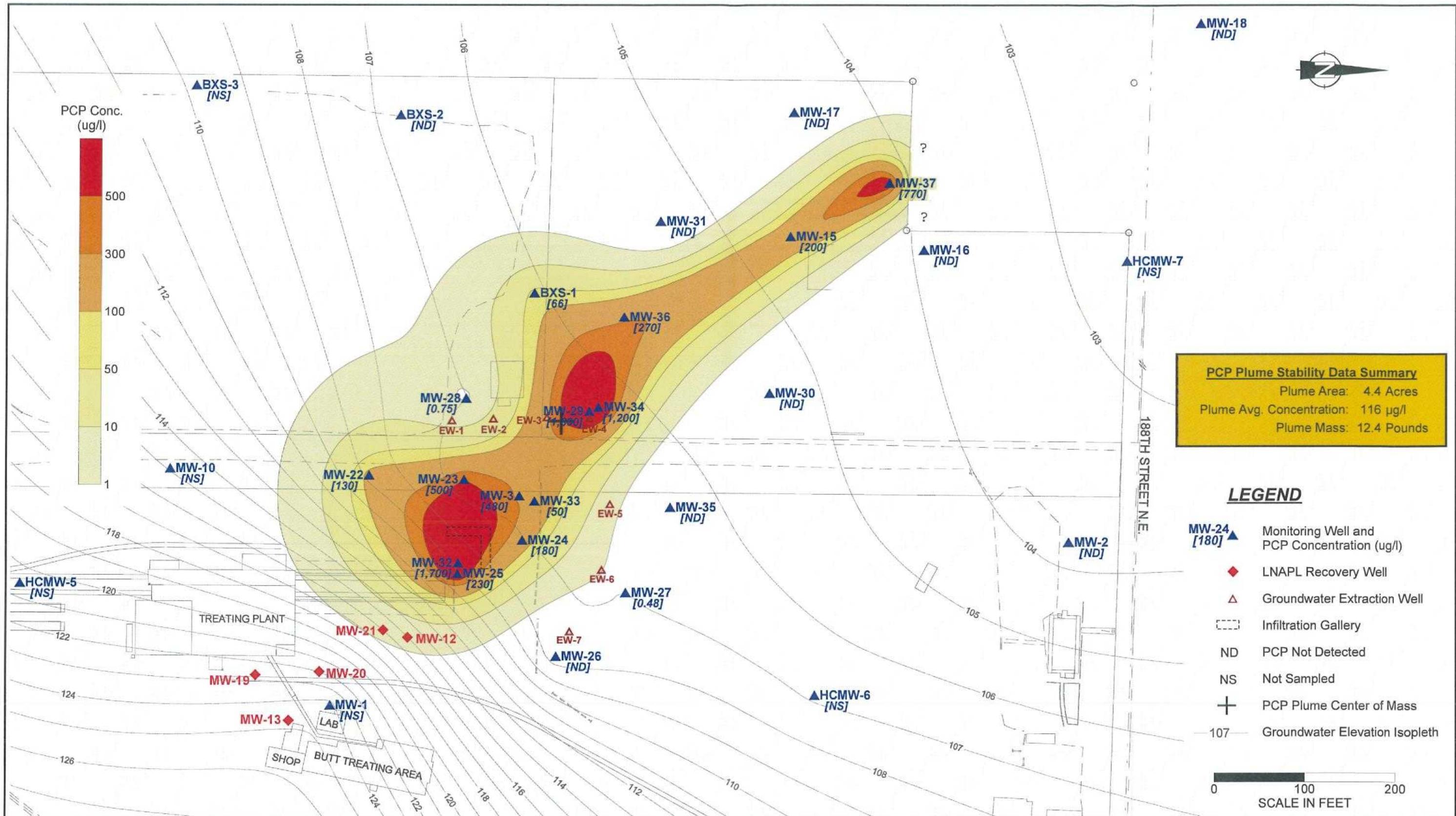


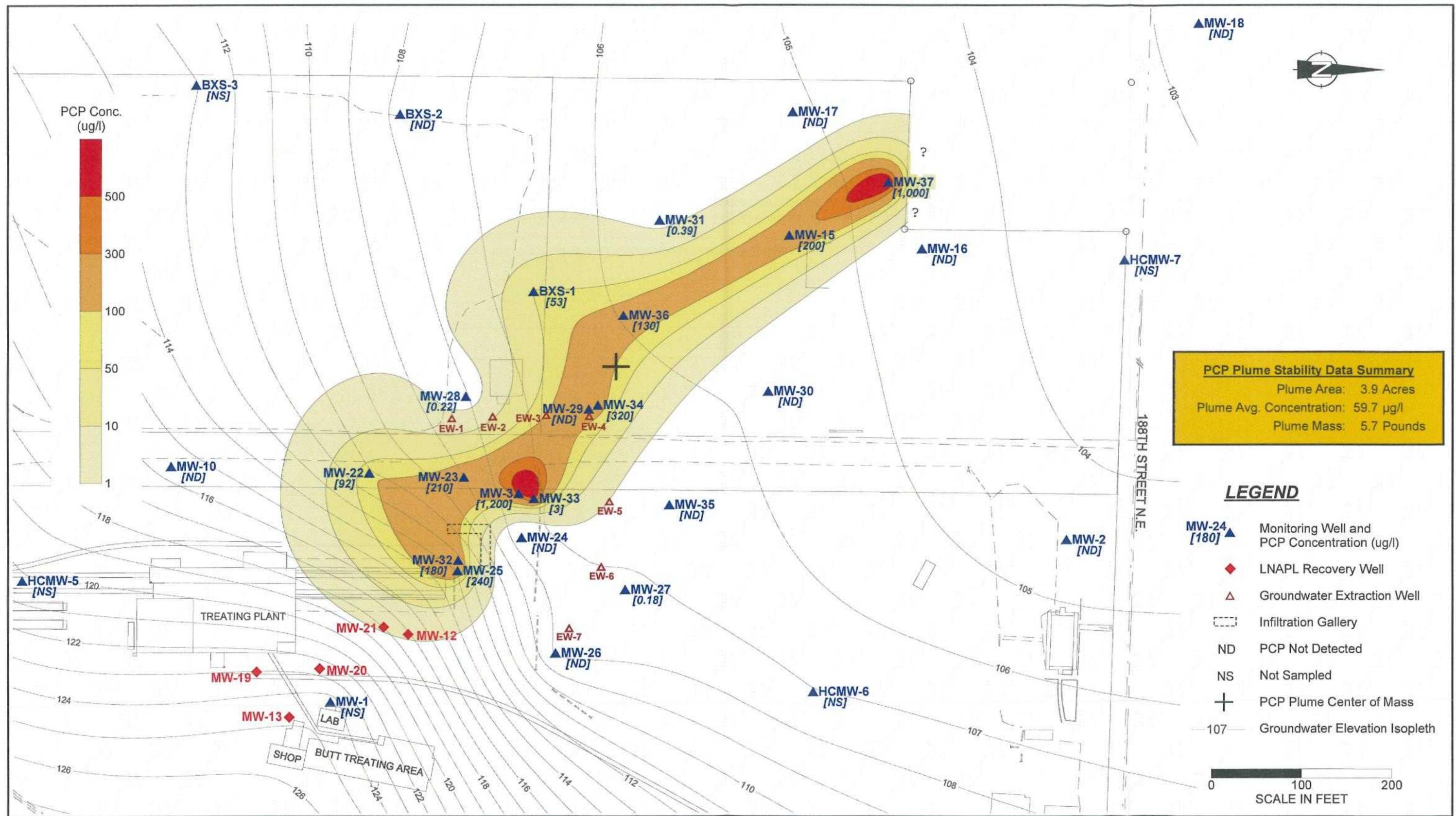
FIRST QUARTER 2013 (FEBRUARY 10, 2013) GROUNDWATER ELEVATION CONTOUR MAP
Former J.H. Baxter and Co. Wood Treating Facility
Arlington, Washington

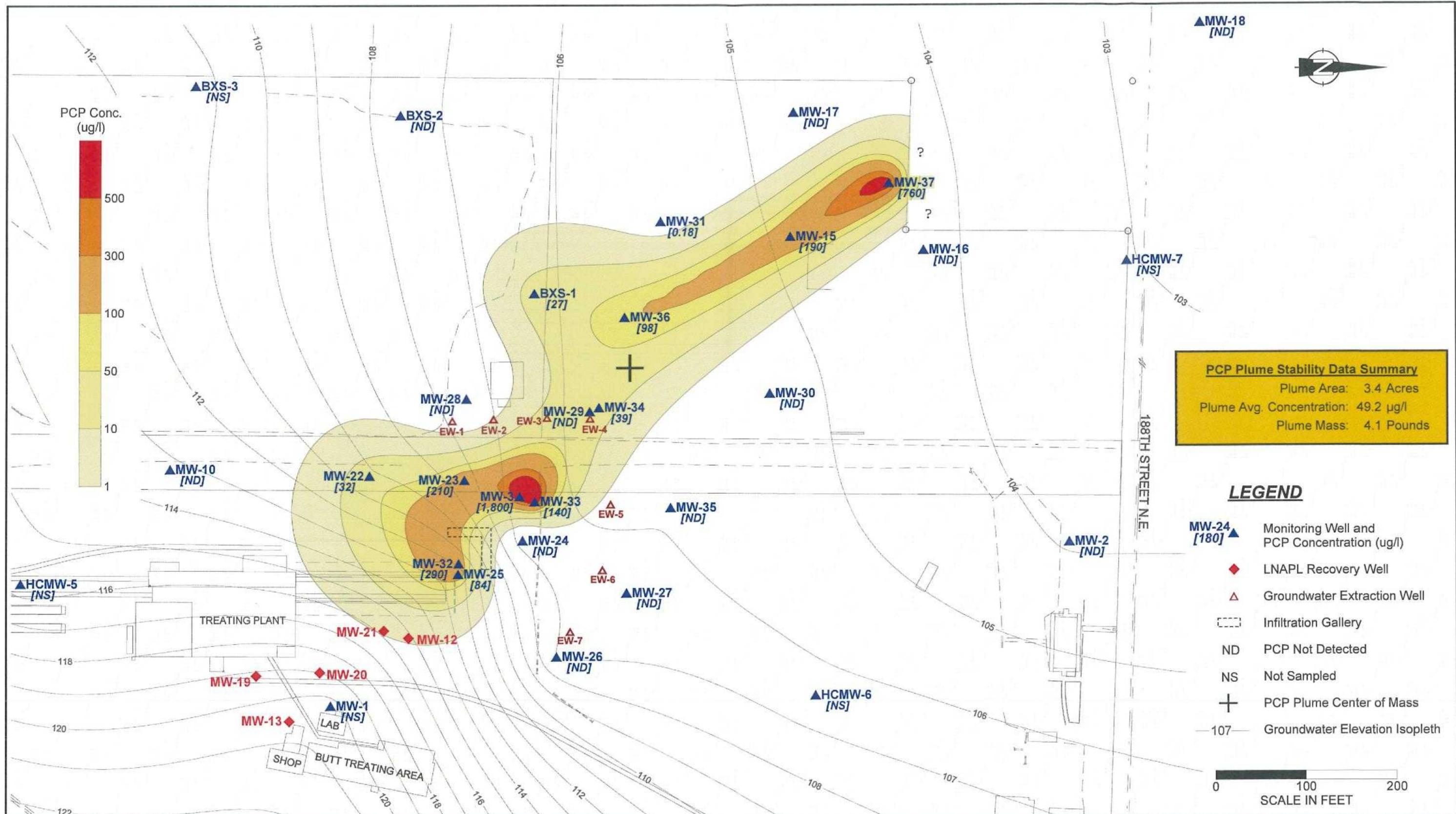
Prepared By: EO	Project No. 12706
Date: 3/11/12	Figure 4

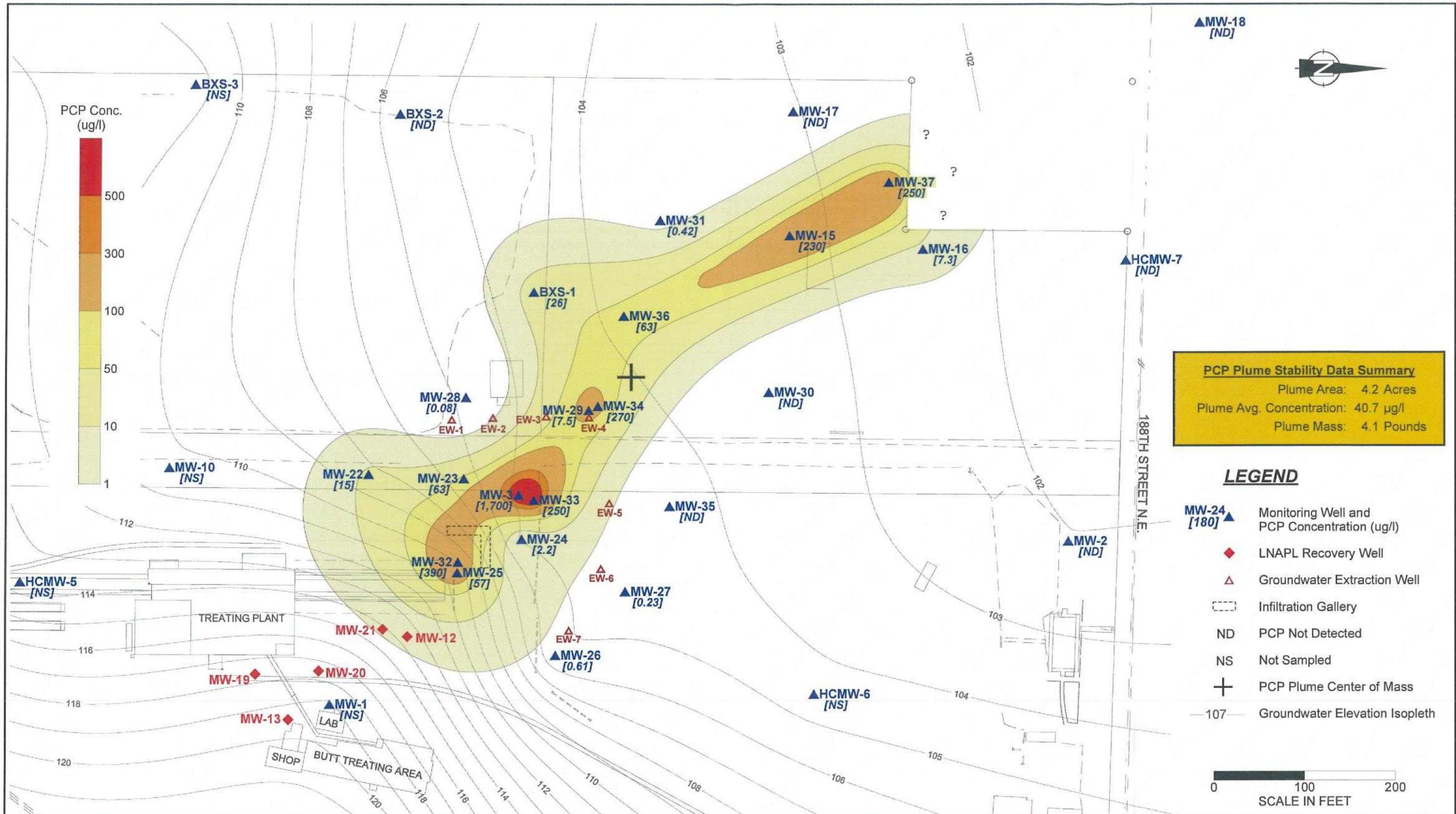


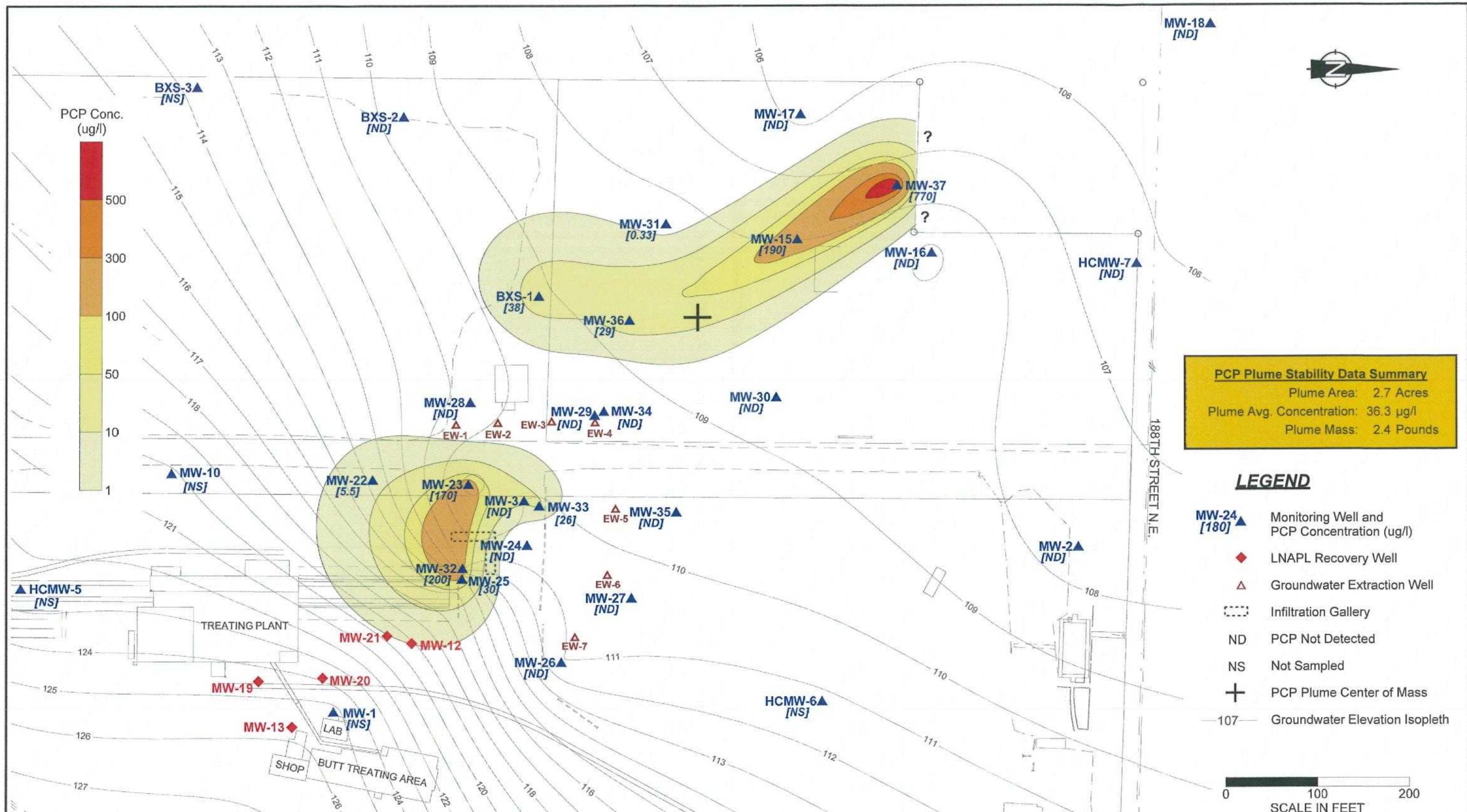


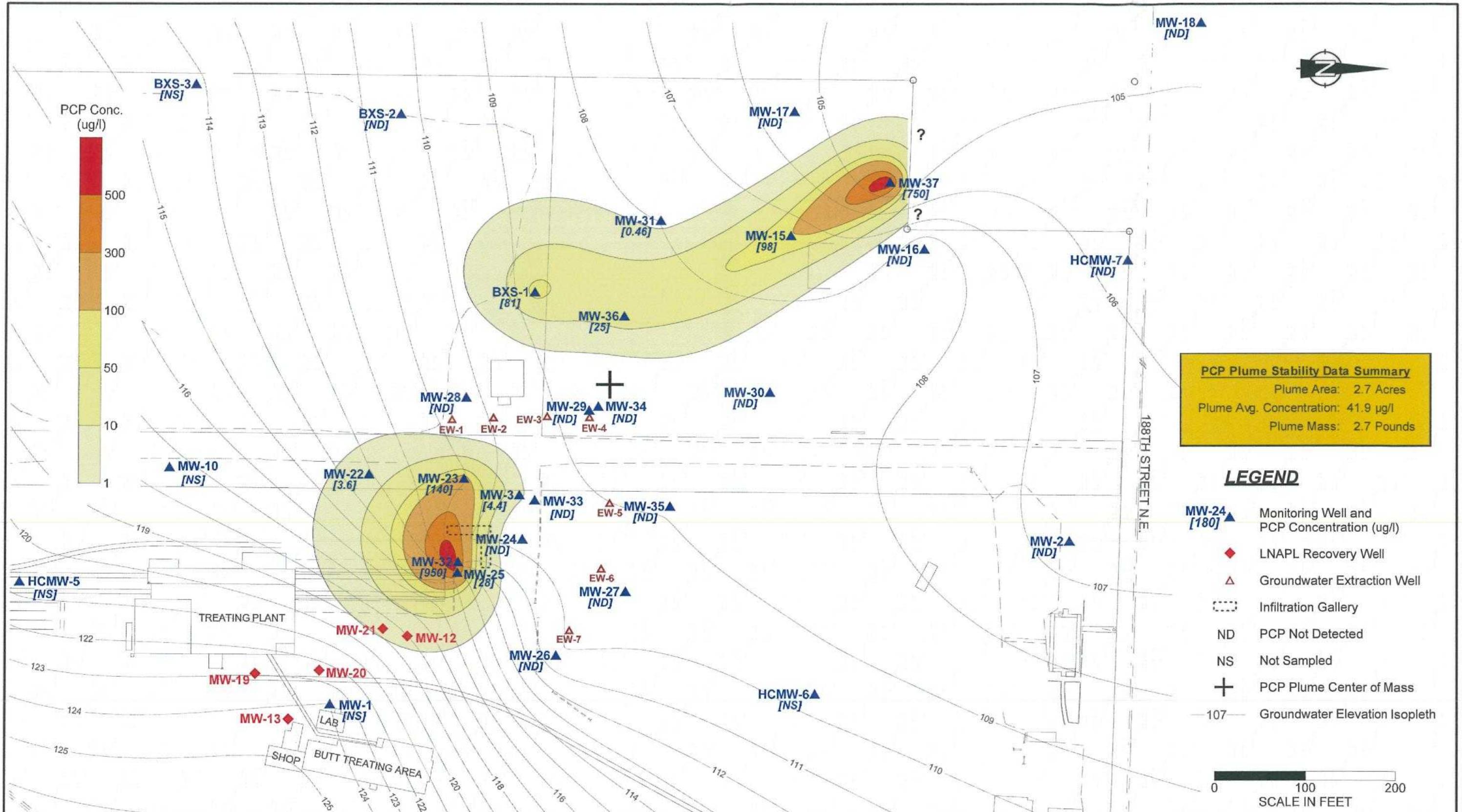


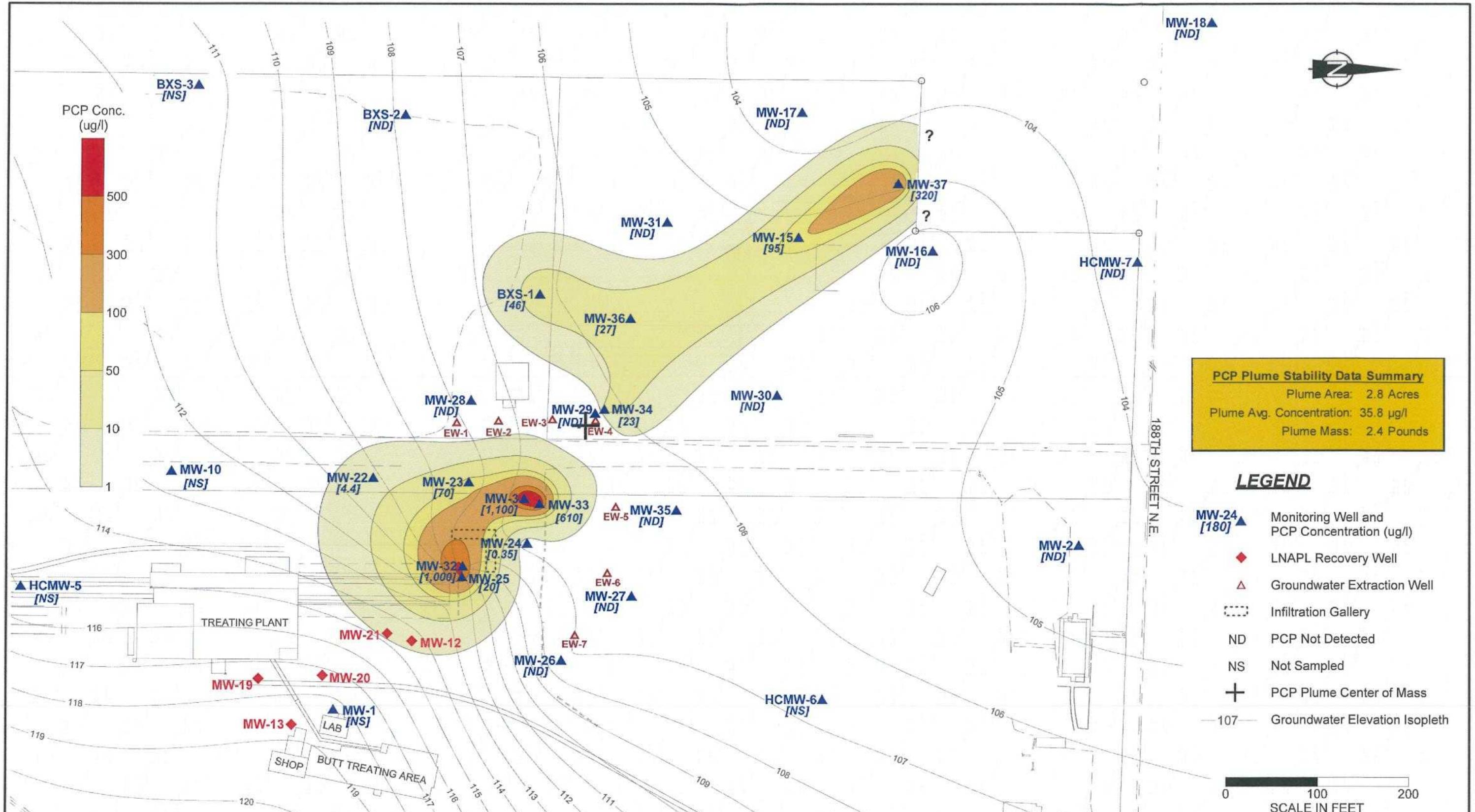


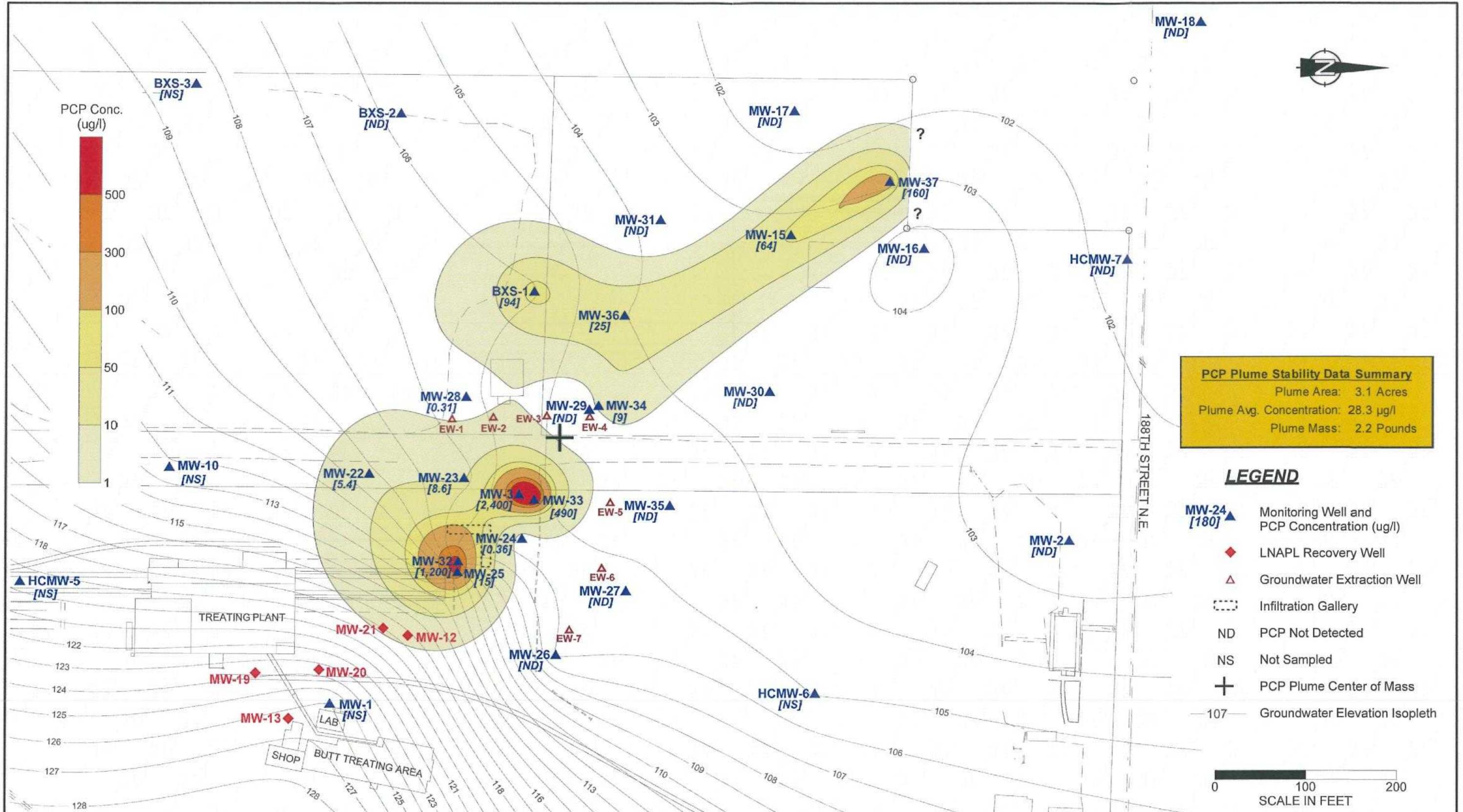


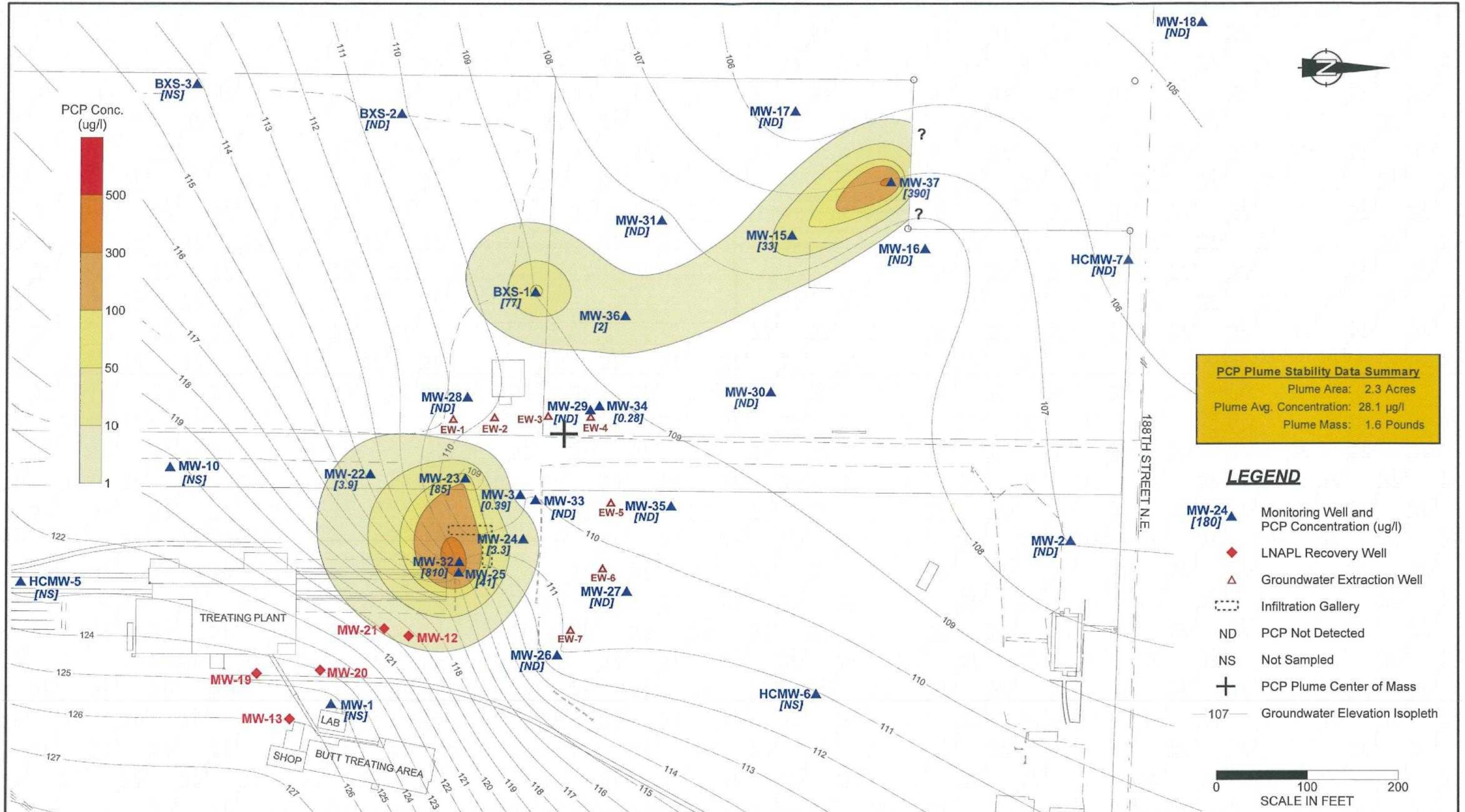


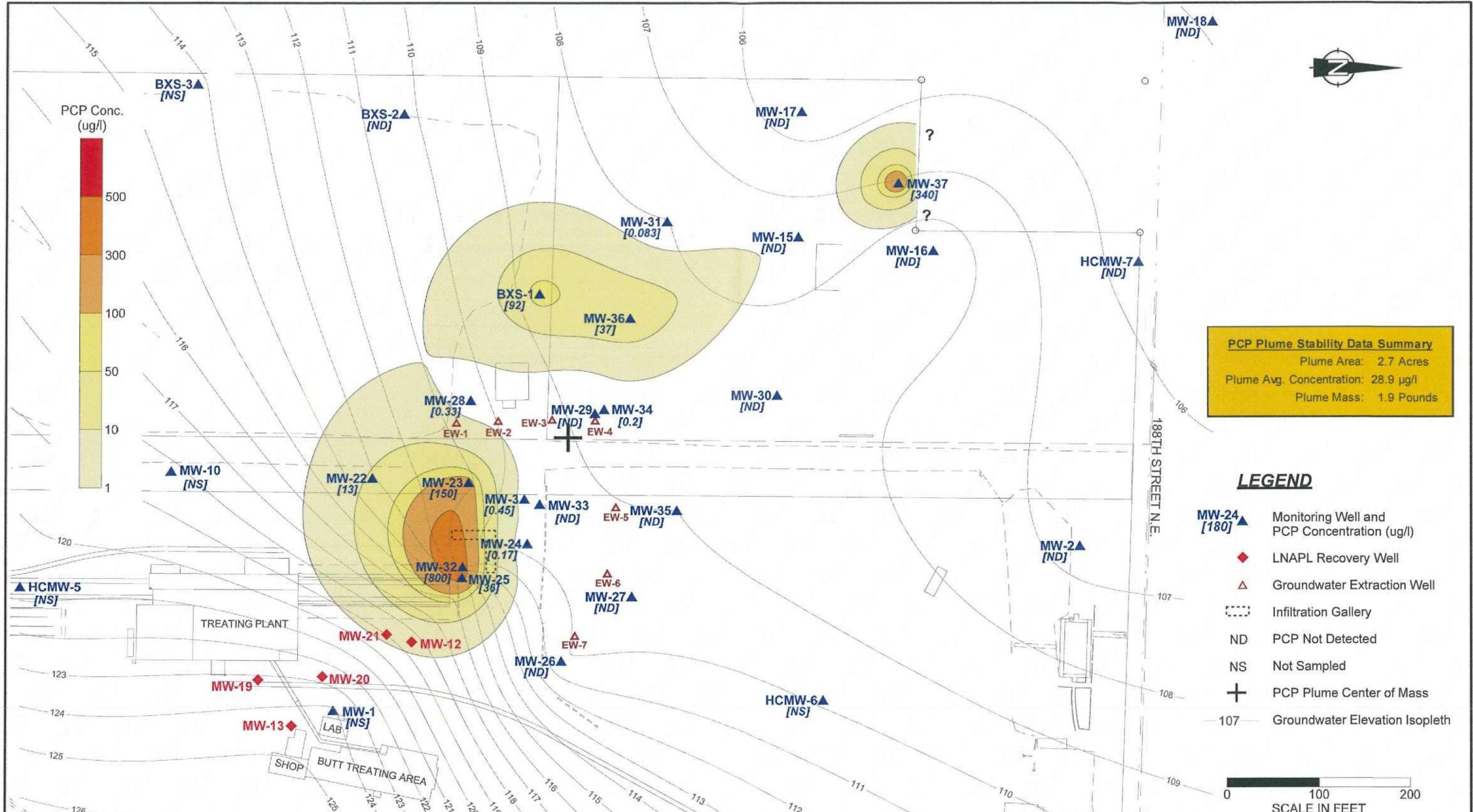


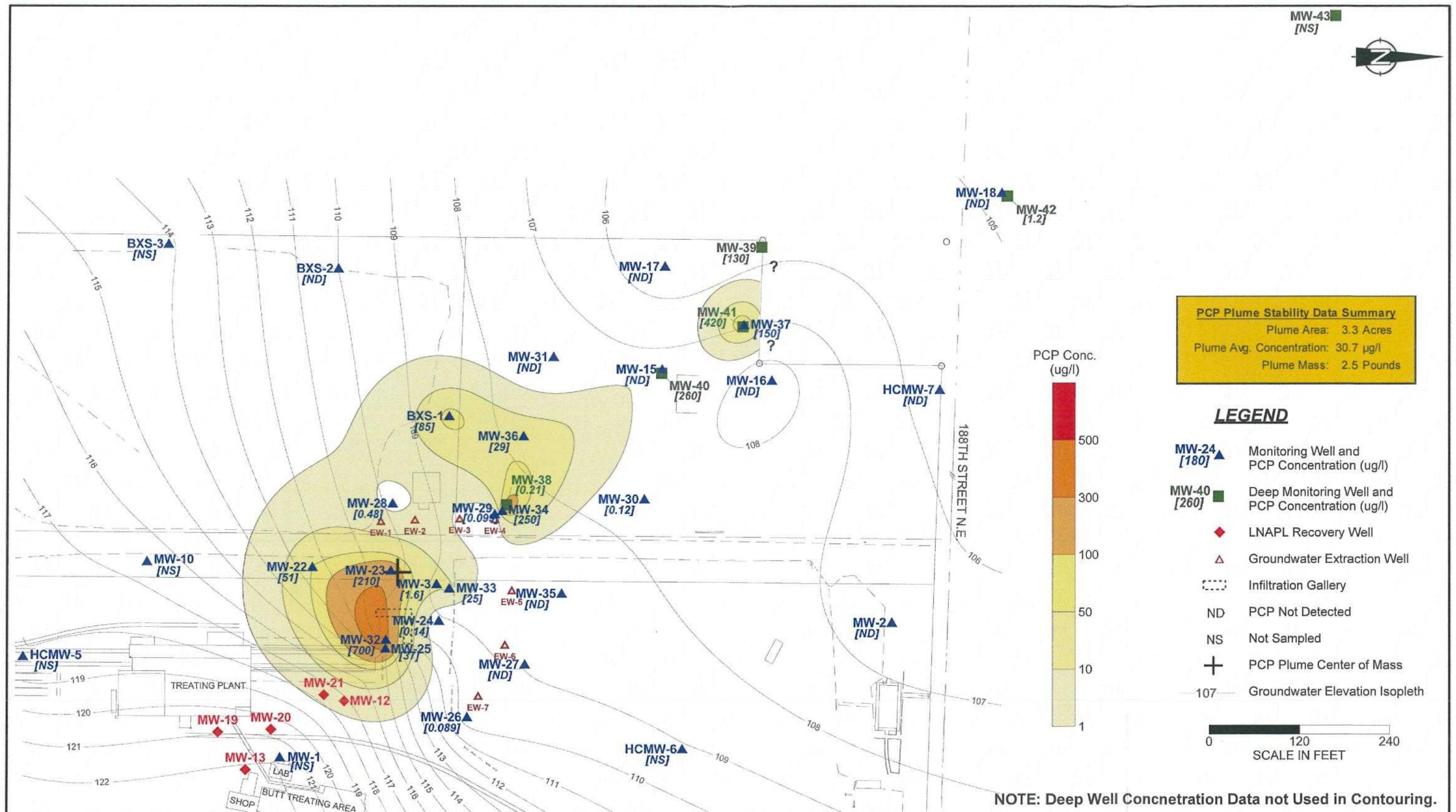


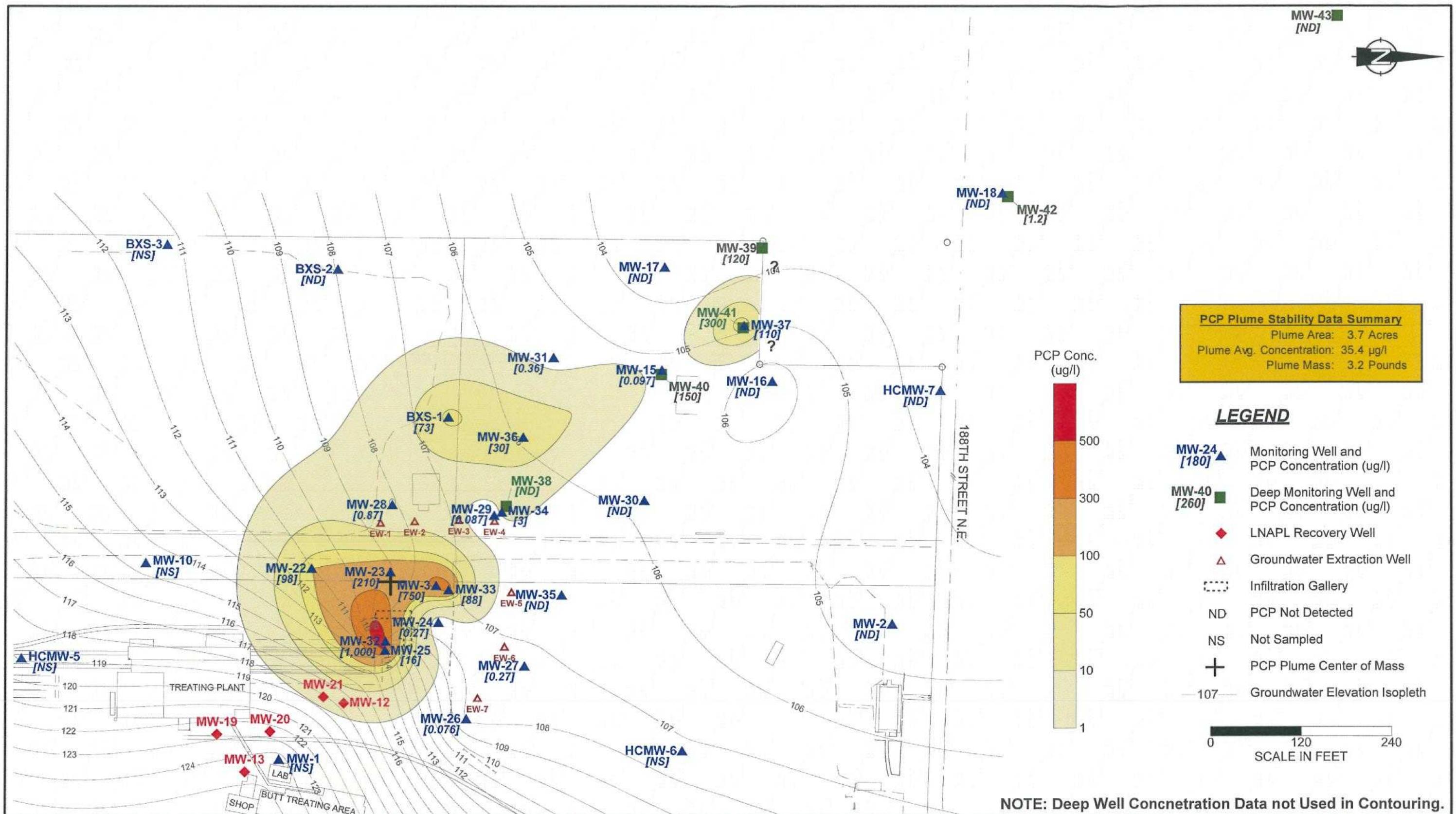


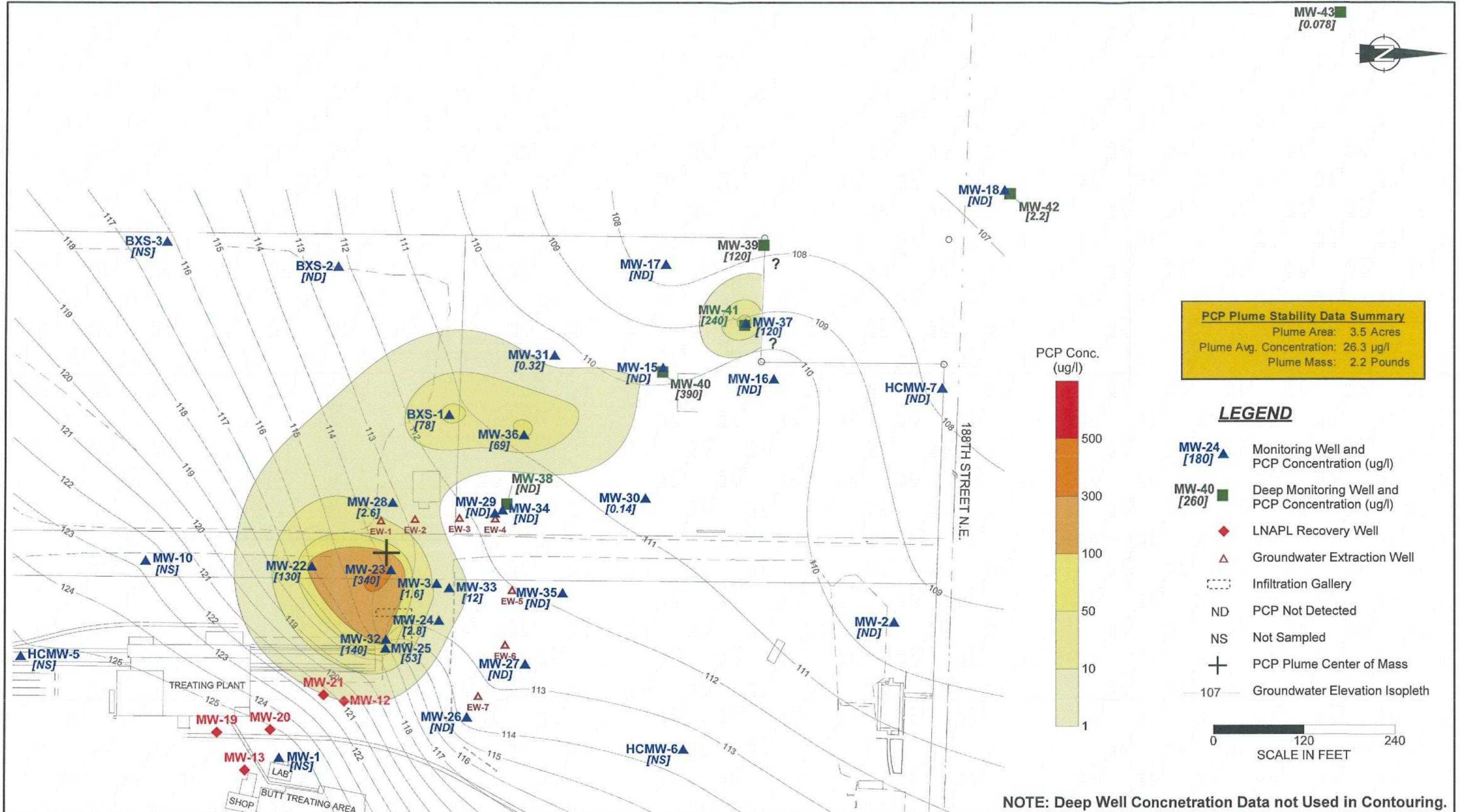


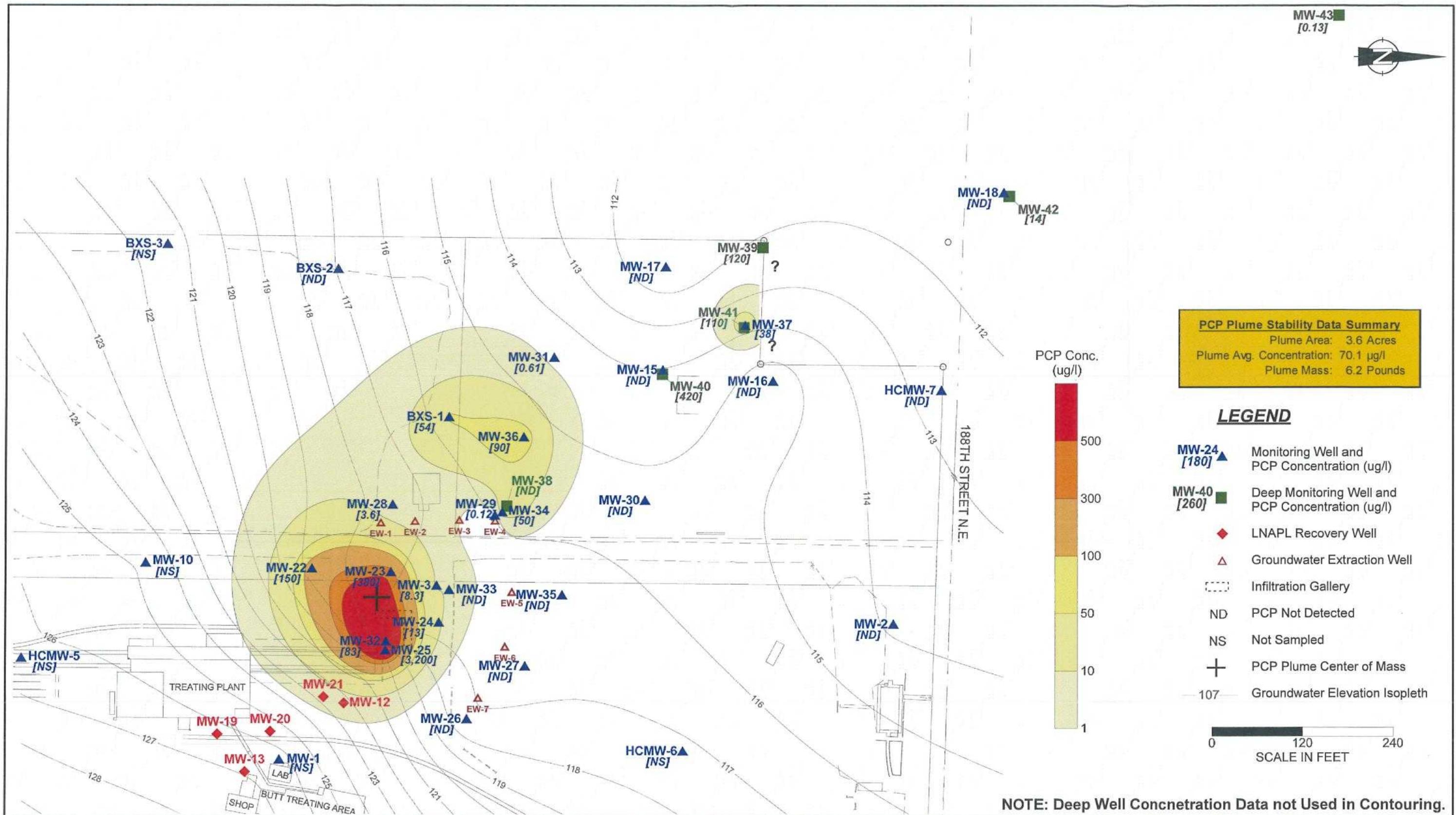


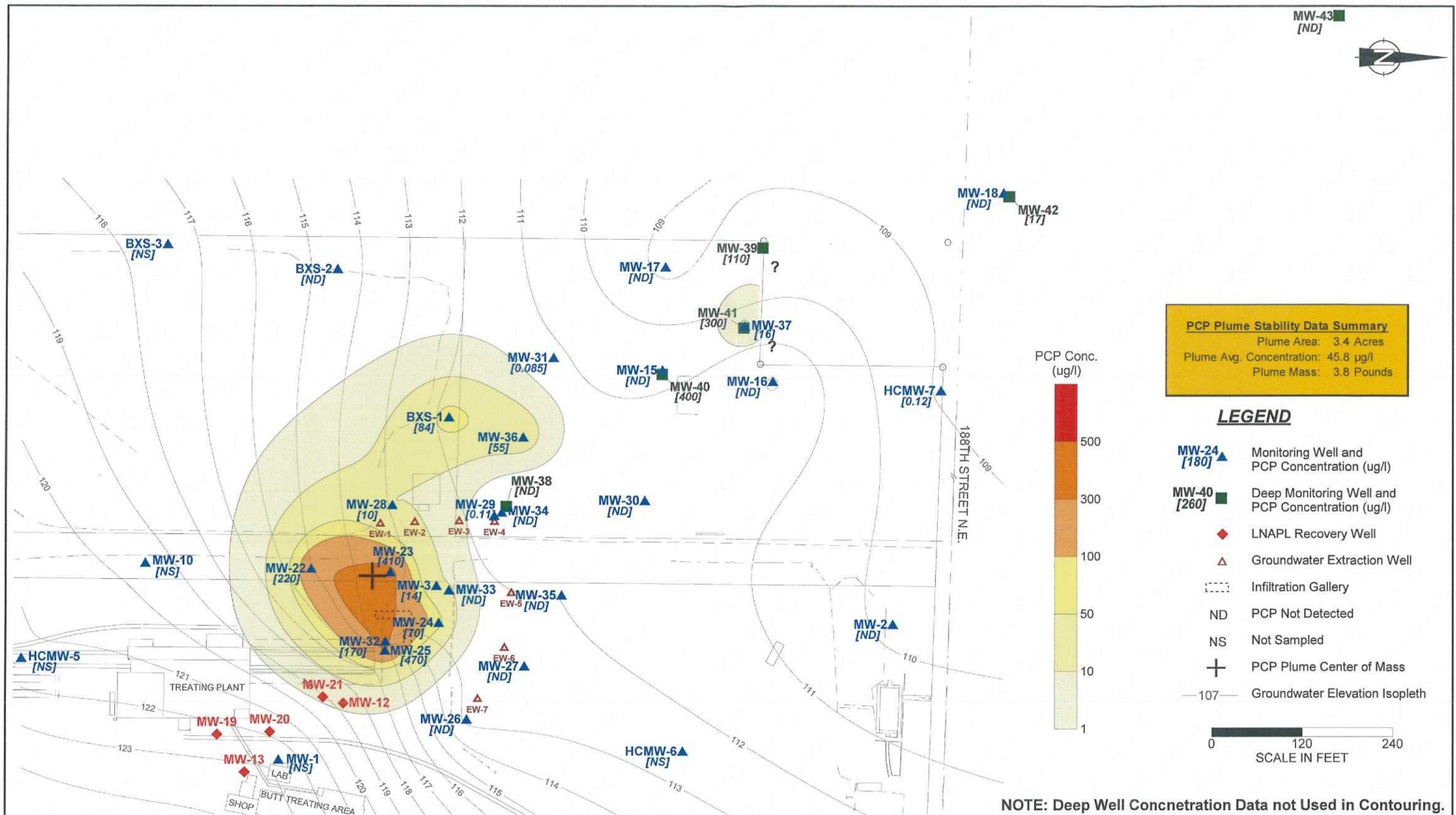


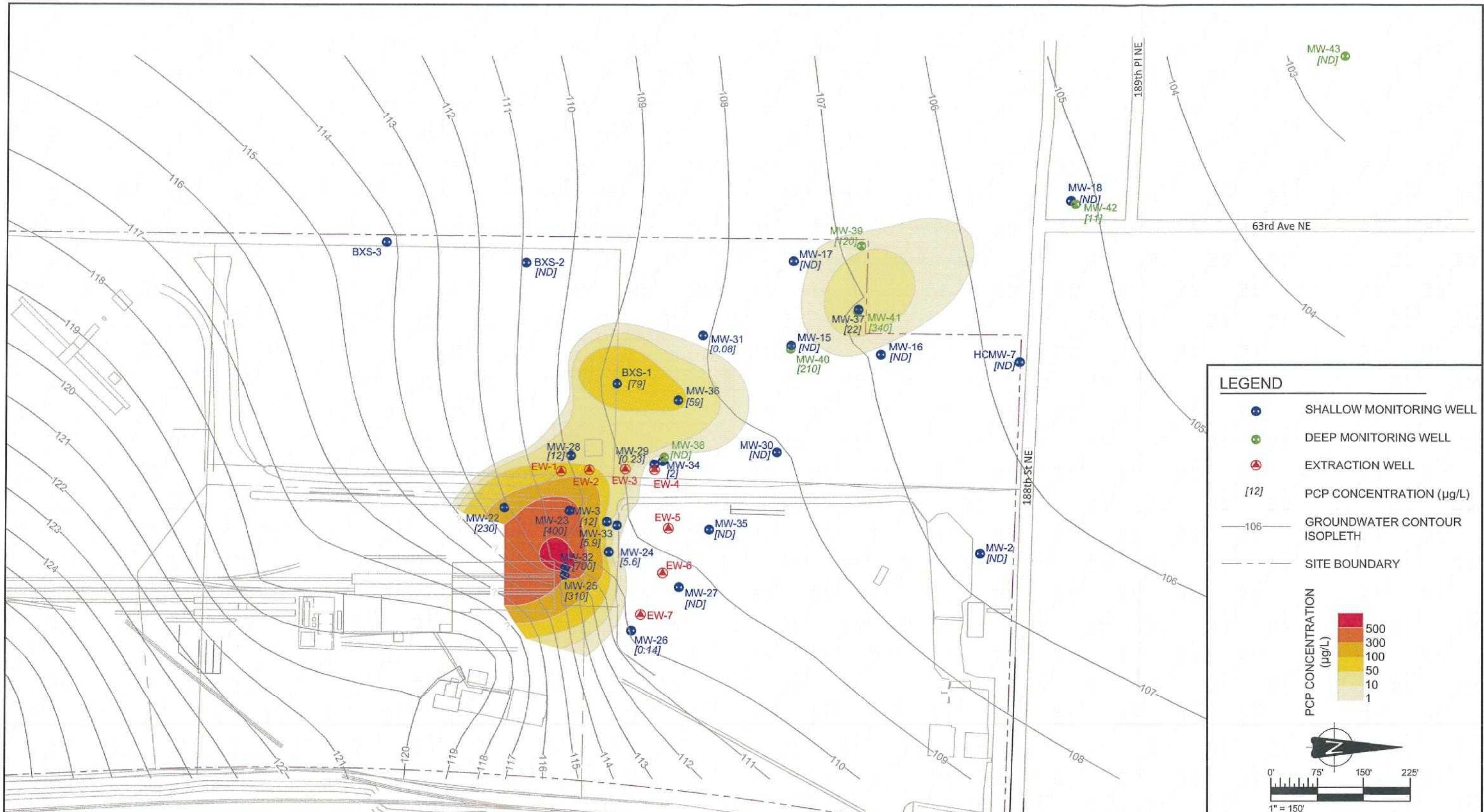












NOTES:
UNITS $\mu\text{g/L}$
ND Undetected
NA Not Analyzed



CLIENT:

J.H. BAXTER

AMEC
7376 S.W. Durham Road
Portland, OR, U.S.A. 97224



DWN BY:

PM

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

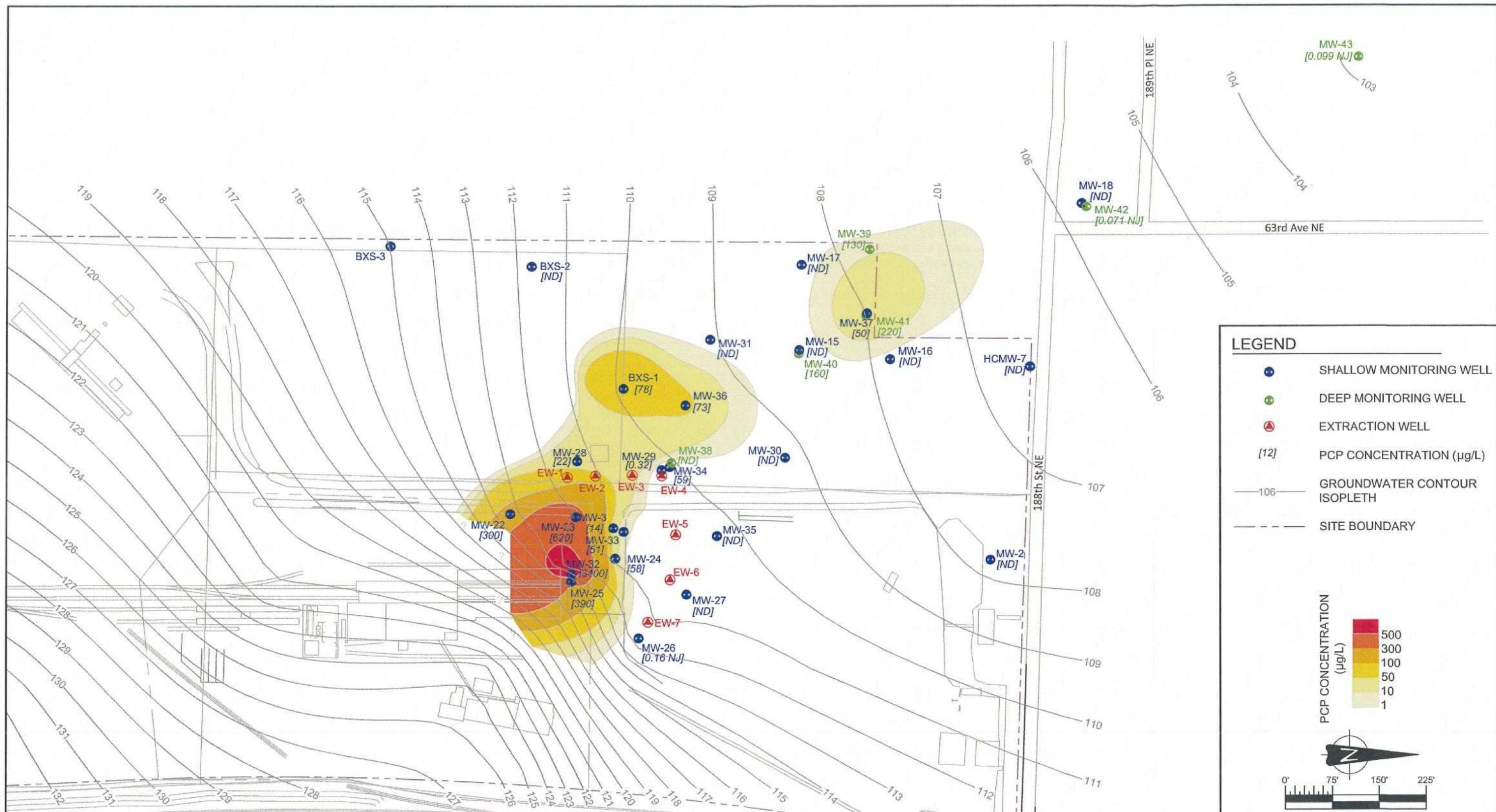
DATE: MARCH 2012

PROJECT NO: 161M125610

REV. NO.: A

FIGURE No.

22



NOTES:
 UNITS $\mu\text{g/L}$
 ND Undetected
 NJ Tentatively Identified Analyte; Estimated Value



CLIENT:

J.H. BAXTER

AMEC
7376 S.W. Durham Road
Portland, OR. U.S.A. 97224



DWN BY:

PM

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

DATE:

APRIL 2012

PROJECT NO:

161M125610

REV. NO.:

A

FIGURE No.

23



NOTES:
 UNITS $\mu\text{g}/\text{L}$
 ND Undetected
 NJ Tentatively Identified Analyte; Estimated Value



CLIENT:

J.H. BAXTER

AMEC
7376 S.W. Durham Road
Portland, OR. U.S.A. 97224



DWN BY:

PM

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

DATE:
NOVEMBER 2012

PROJECT NO:
161M125610

CHKD BY:

SB

DATUM:

-

PROJECTION:

-

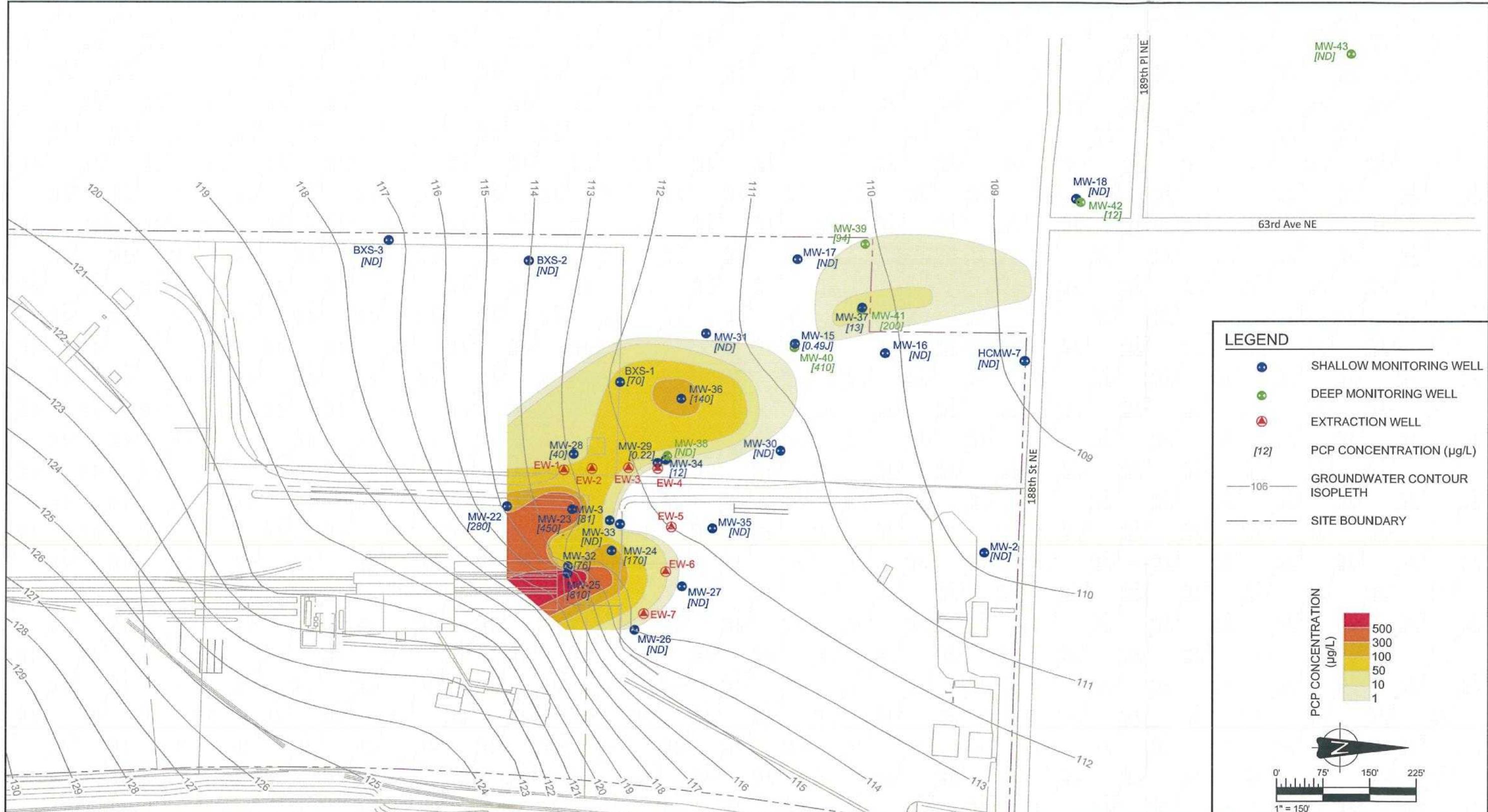
SCALE:

1' = 150'

PENTACHLOROPHENOL ISOLETH MAP
MAY 2012

REV. NO.:
A

FIGURE No.
24



NOTES:
 UNITS $\mu\text{g/L}$
 ND Undetected
 NJ Tentatively Identified Analyte; Estimated Value



CLIENT:

J.H. BAXTER

AMEC
7376 S.W. Durham Road
Portland, OR U.S.A. 97224



DWN BY:

PM

CHK'D BY:

SB

DATUM:

-

PROJECTION:

-

SCALE:

1"=150'

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

DATE: NOVEMBER 2012
PROJECT NO: 161M125611
REV. NO.: A
FIGURE No. 25

PENTACHLOROPHENOL ISOPLETH MAP
AUGUST 2012



NOTES:
 UNITS $\mu\text{g}/\text{L}$
 ND Undetected
 NJ Tentatively Identified Analyte; Estimated Value



CLIENT:

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AMEC
7376 S.W. Durham Road
Portland, OR, U.S.A. 97224



DWN BY:

PM

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

DATE:
NOVEMBER 2012

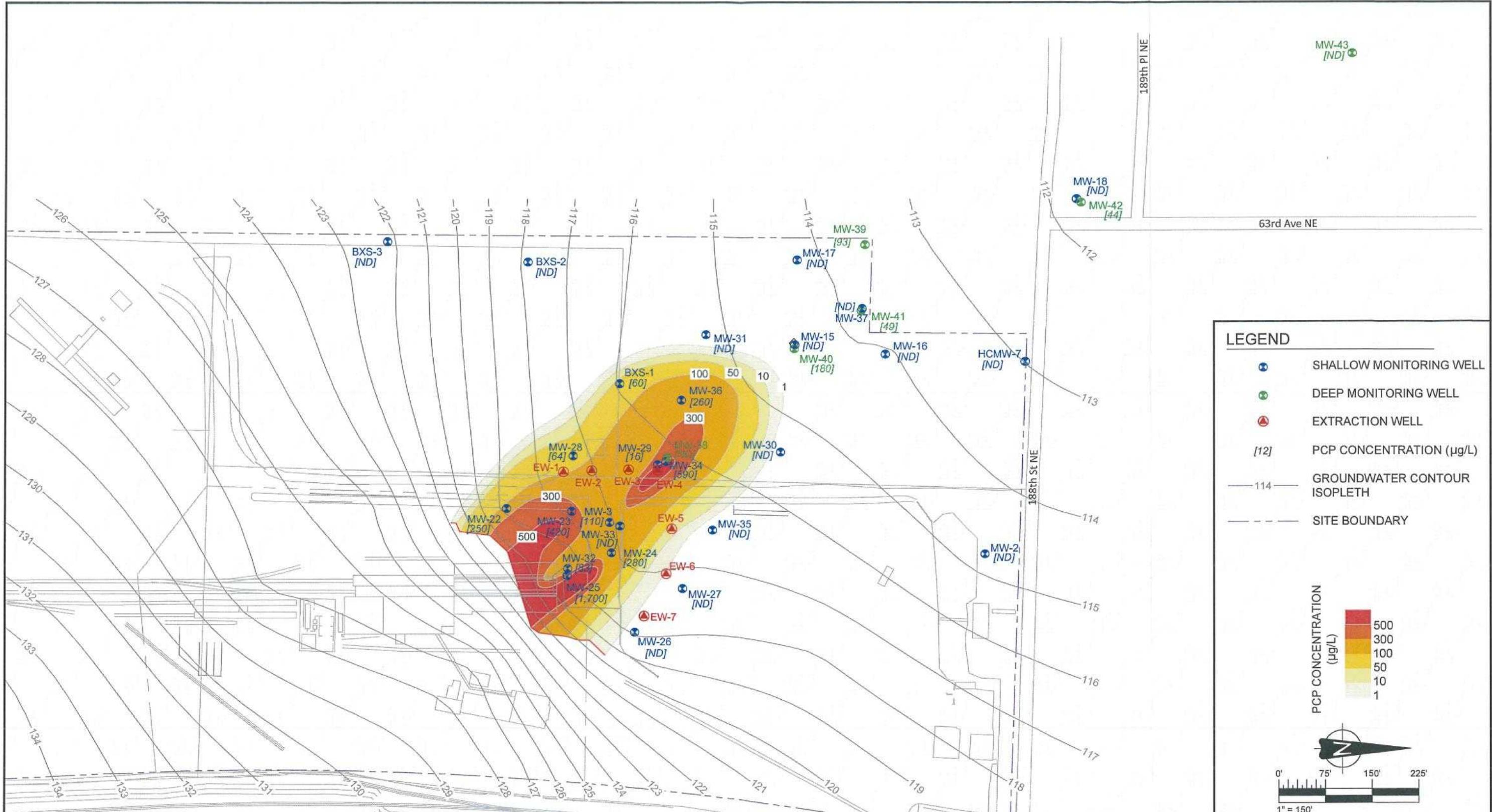
PROJECT NO:
161M125611

REV. NO.:
A

FIGURE No.

26

PENTACHLOROPHENOL ISOPLETH MAP
NOVEMBER 2012



NOTES:
UNITS $\mu\text{g}/\text{L}$
ND Undetected
NJ Tentatively Identified Analyte; Estimated Value



CLIENT:

J.H. BAXTER

AMEC
7376 S.W. Durham Road
Portland, OR U.S.A. 97224



DWN BY:

PM

CHK'D BY:

SB

DATUM:

-

PROJECTION:

-

SCALE:

1"=150'

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

DATE: JULY 2013

PROJECT NO:
361M125611

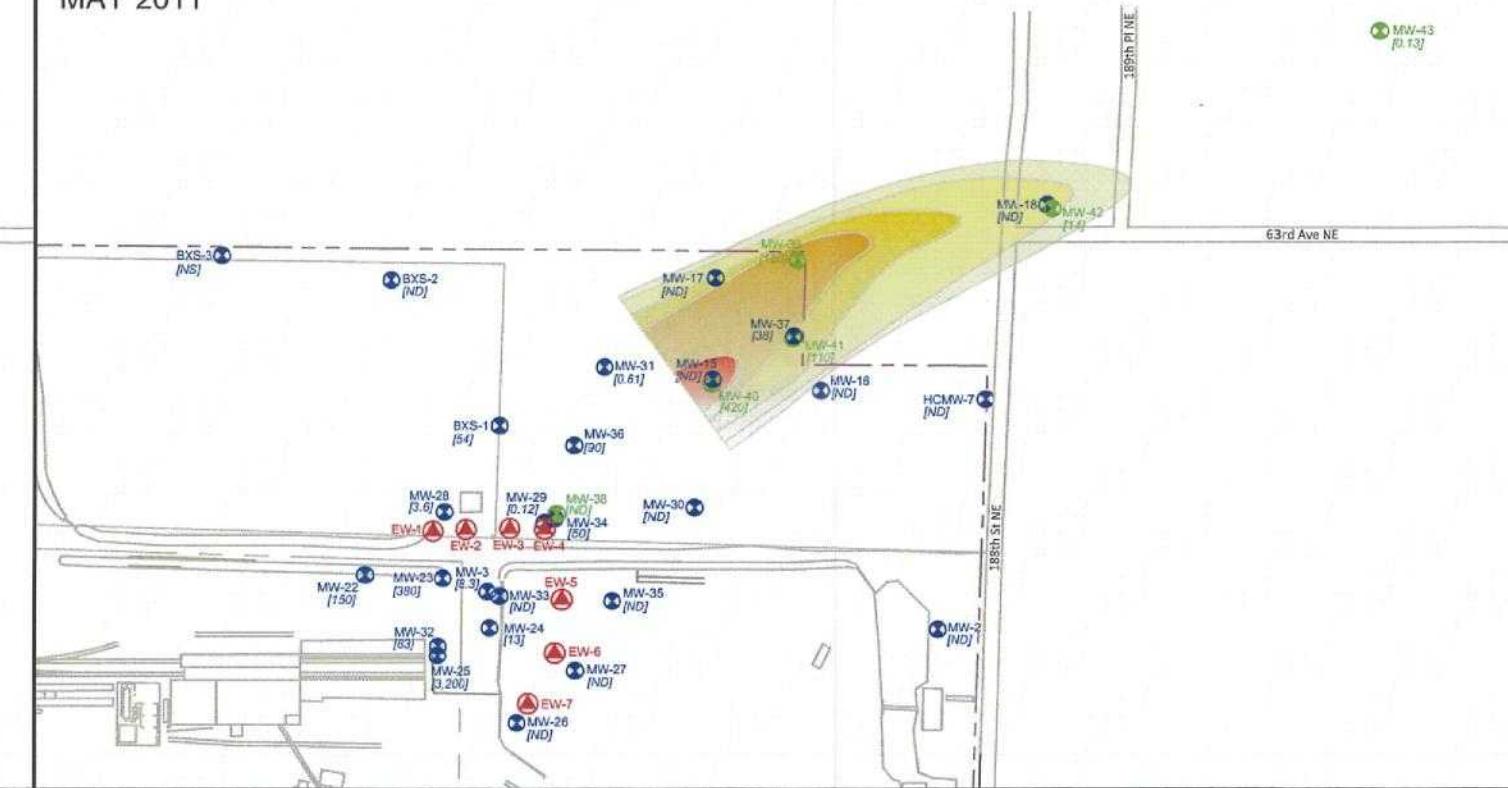
REV. NO.: A
FIGURE No.
27

PENTACHLOROPHENOL ISOPLETH MAP
FEBRUARY 2013

FEBRUARY 2011



MAY 2011



AUGUST 2011

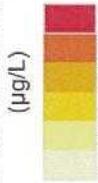


LEGEND

- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- EXTRACTION WELL
- [12] PCP CONCENTRATION (µg/L)

SITE BOUNDARY

PCP CONCENTRATION
(µg/L)



NOTES:
UNITS
ND µg/L
NA Undetected
Not Analyzed



0' 175' 250' 325'
1" = 250'

CLIENT:

J.H. BAXTER



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7376 S.W. Durham Road
Portland, OR. U.S.A. 97224

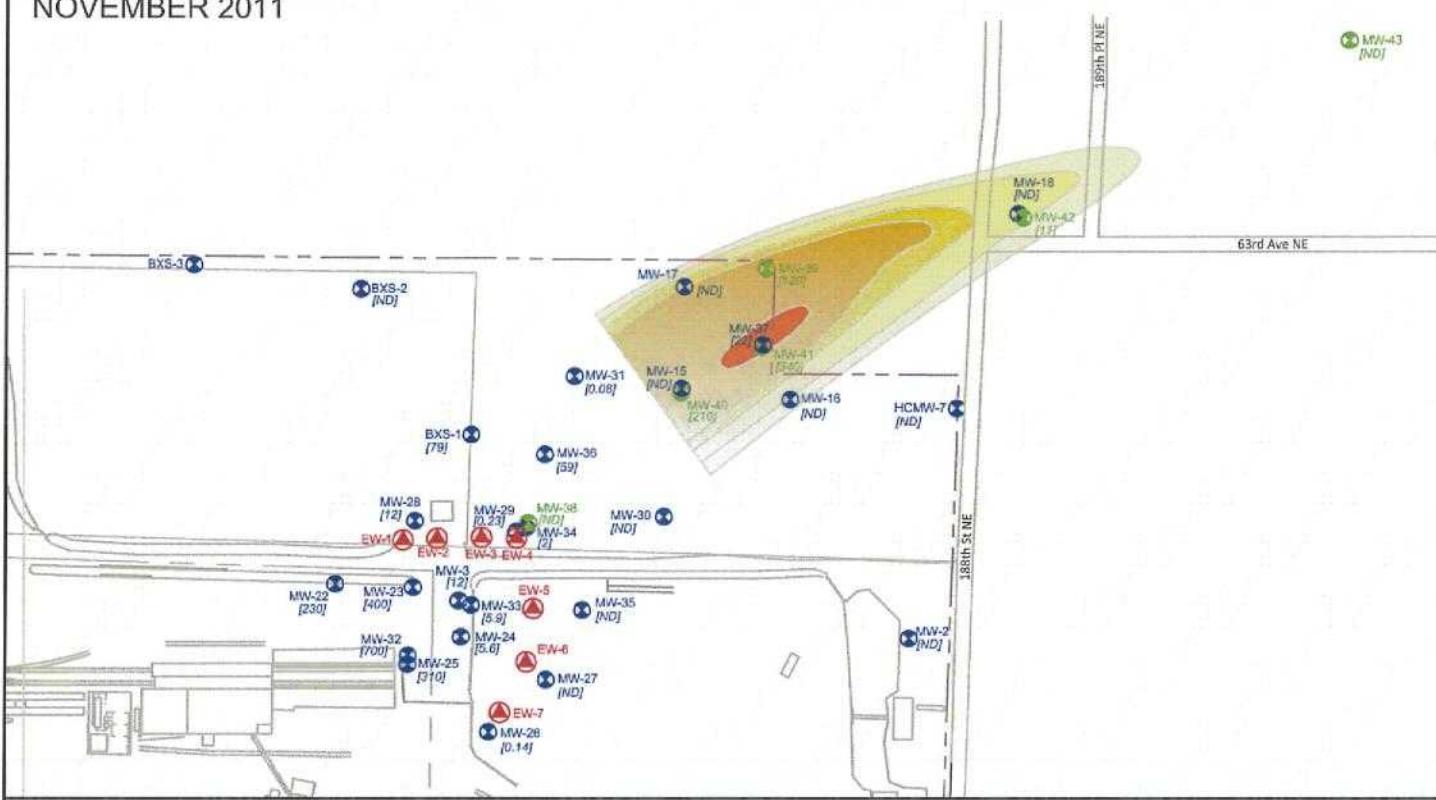


FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

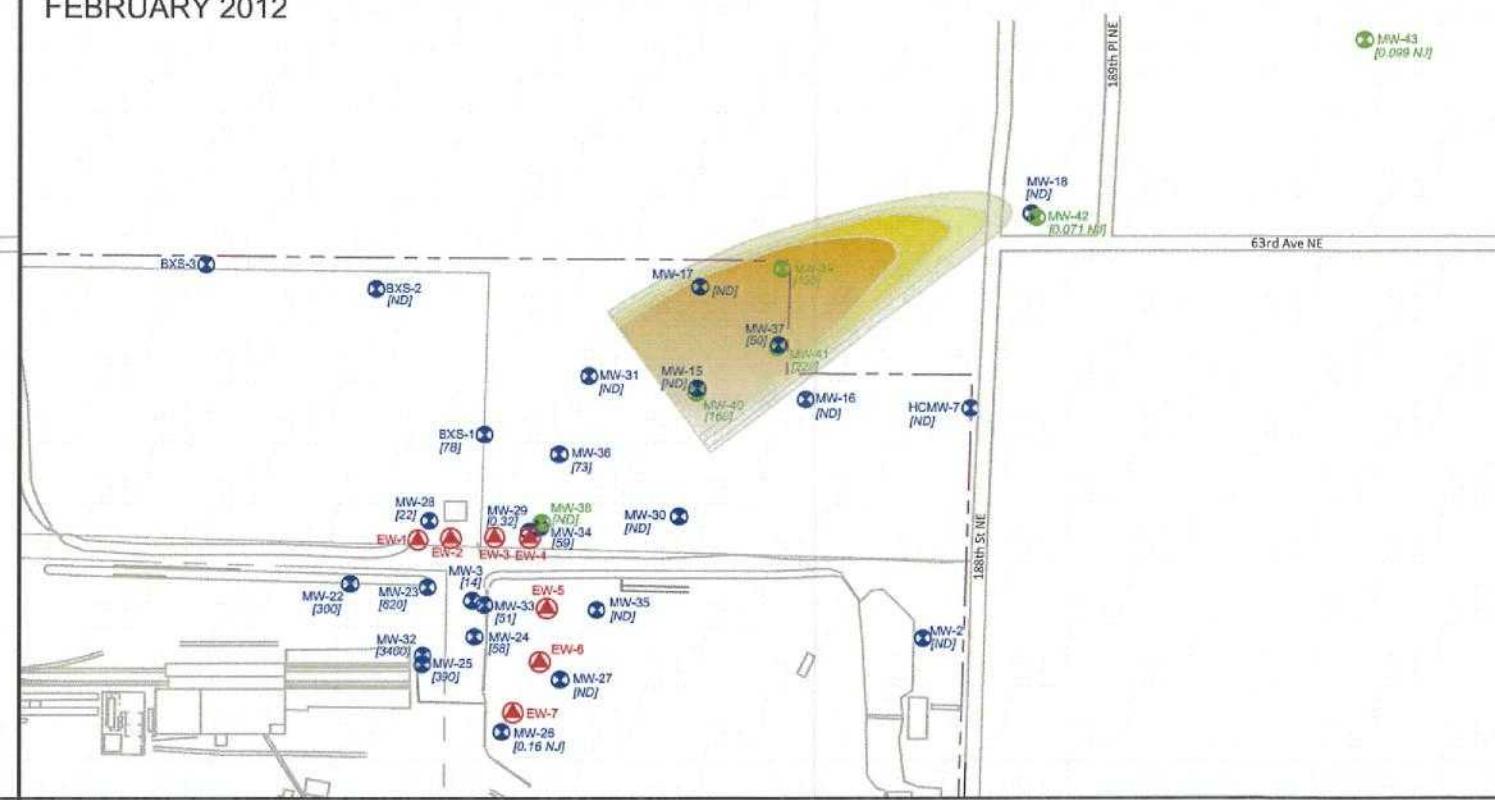
PENTACHLOROPHENOL ISOPLETH MAP
FEBRUARY, MAY & NOVEMBER 2011
DEEPER ZONE ONLY

DATE: NOVEMBER 2012
PROJECT NO: 161M125610
REV. NO.: A
FIGURE No. 28

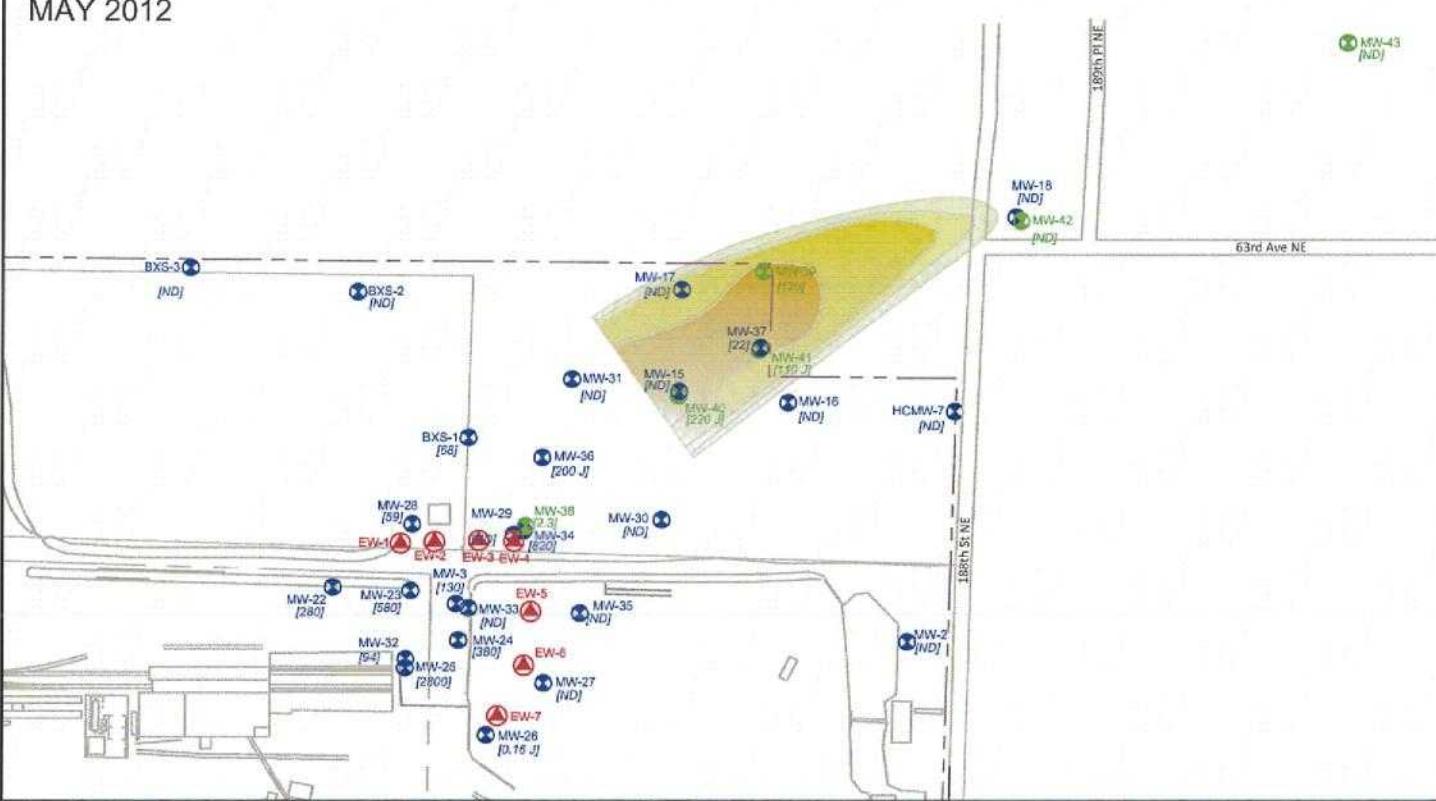
NOVEMBER 2011



FEBRUARY 2012



MAY 2012



LEGEND

● SHALLOW MONITORING WELL

NOTES:
UNITS
ND µg/L
NA Not Analyzed

● DEEP MONITORING WELL

● EXTRACTION WELL

[12] PCP CONCENTRATION (µg/L)

— SITE BOUNDARY

PCP CONCENTRATION (µg/L)



0'
175'
250'
325'
1" = 250'

CLIENT:

J.H. BAXTER



AMEC
7376 S.W. Durham Road
Portland, OR, U.S.A. 97224



FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

PENTACHLOROPHENOL ISOPLETH MAP
NOVEMBER 2011 & FEBRUARY & MAY 2012
DEEPER ZONE ONLY

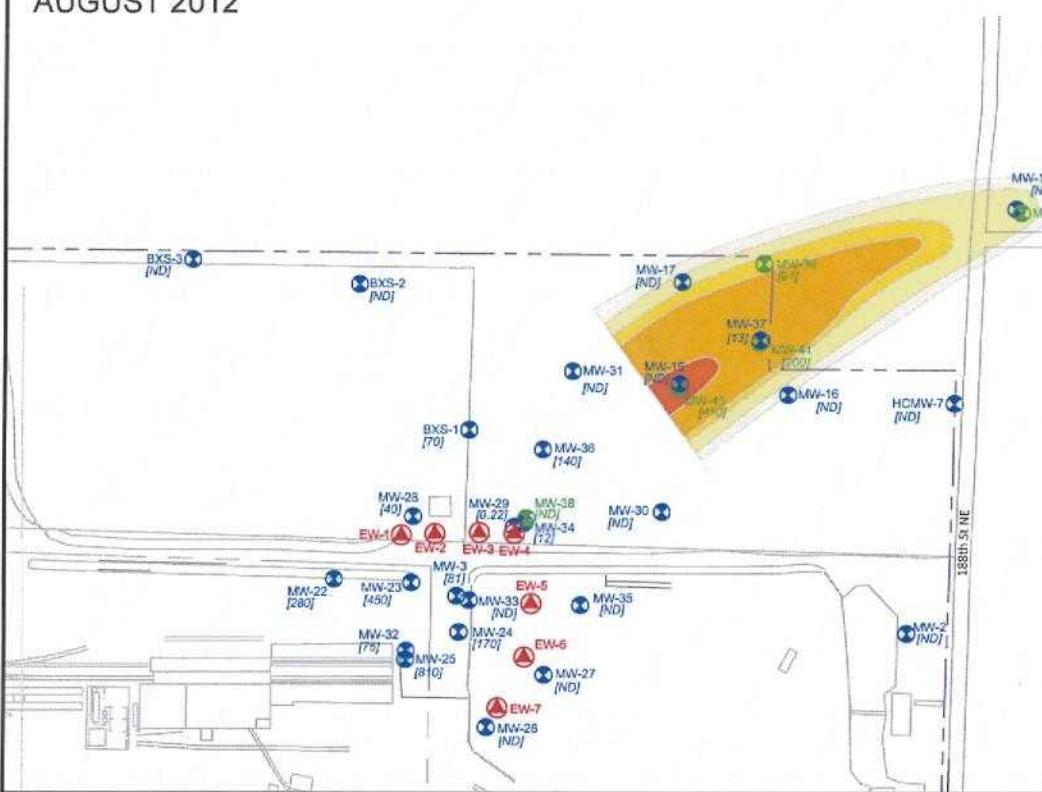
DATE:
NOVEMBER 2012

PROJECT NO:
161M125610

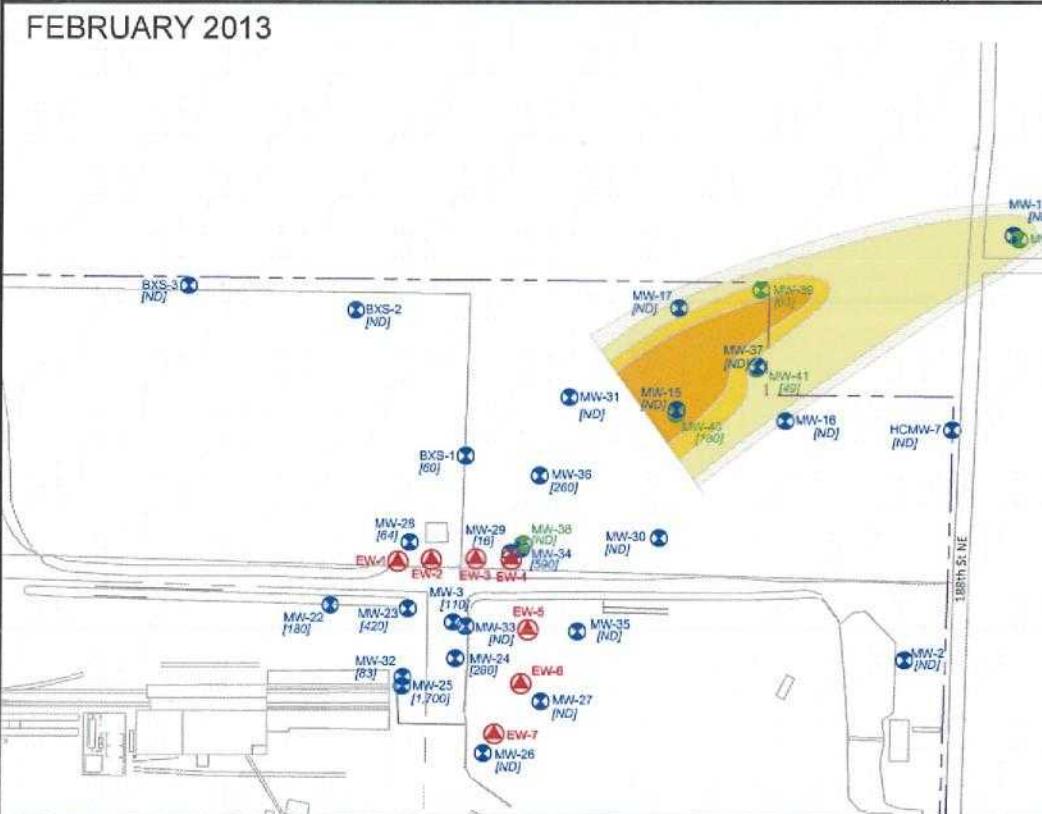
REV. NO.:
A

FIGURE No.
29

AUGUST 2012



NOVEMBER 2012



LEGEND

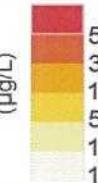
SHALLOW MONITORING WELL

DEEP MONITORING WELL

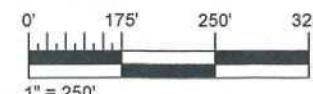
EXTRACTION WELL

PCP CONCENTRATION ($\mu\text{g/L}$)

SITE BOUNDARY

PCP CONCENTRATION
($\mu\text{g/L}$)

NOTES:
UNITS
ND $\mu\text{g/L}$
NA Undetected
 Not Analyzed



CLIENT:

J.H. BAXTER



AMEC
7376 S.W. Durham Road
Portland, OR. U.S.A. 97224



DWN BY:

PM/SD

PROJECT

FORMER J.H. BAXTER AND CO.
WOOD TREATING FACILITY
ARLINGTON, WA

DATE:
MAY 2013

CHK'D BY:

SB

DATUM:

-

PROJECTION:

-

SCALE:

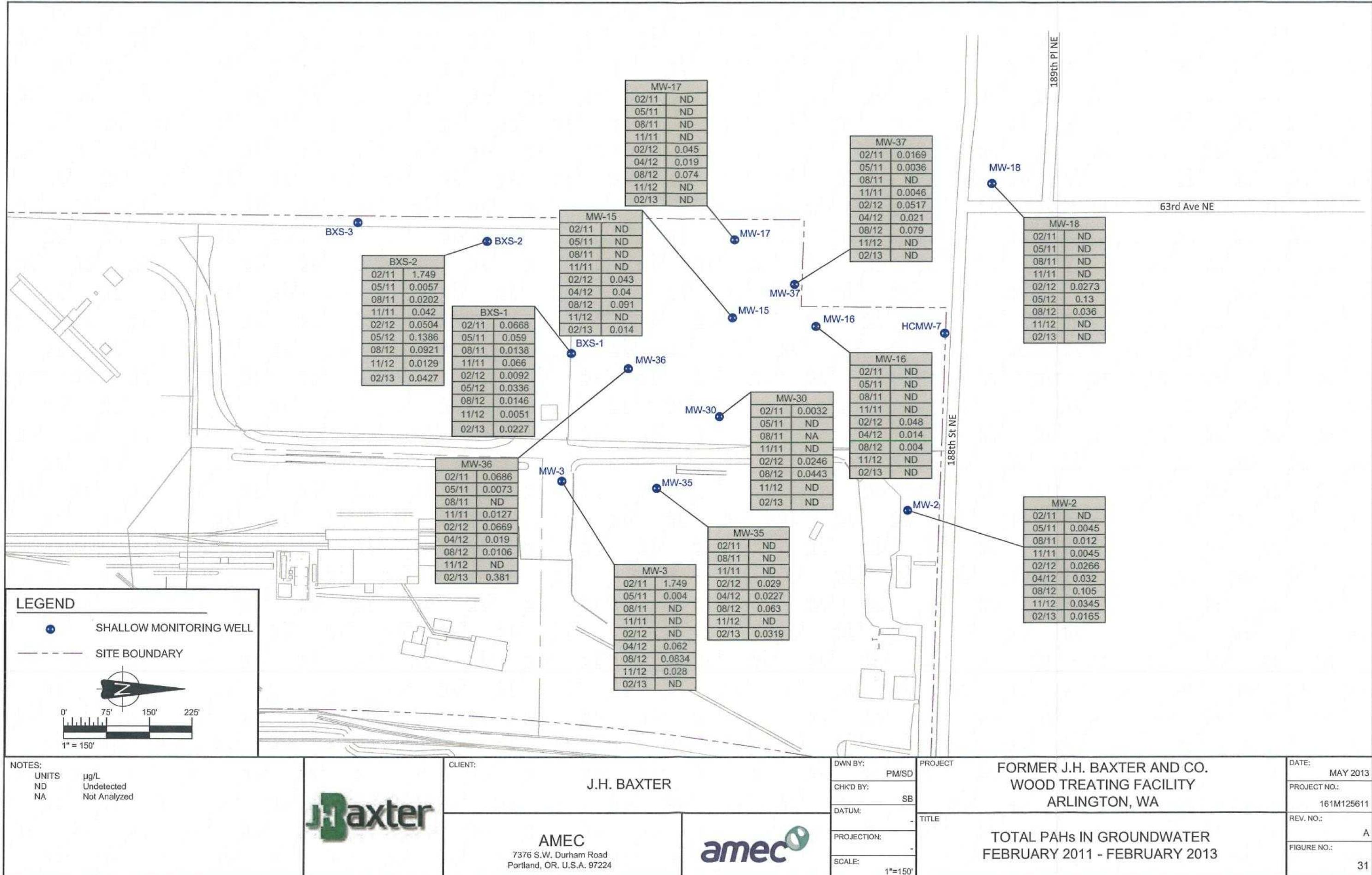
1"=250'

TITLE
PENTACHLOROPHENOL ISOPLETH MAP
AUGUST 2012 & NOVEMBER 2012 &
FEBRUARY 2013
DEEPER ZONE ONLY

PROJECT NO:
161M125610

REV. NO.:
A

FIGURE No.
30





APPENDIX A

Operations and Monitoring Summary - First Quarter 2013

Memo

To: J. Stephen Barnett, AMEC
From: Eric Olson
Tel: (206) 342-1760
Fax: (206) 342-1761
Date: April 3, 2013

Project: 3-61M-125611.0001.5
cc: Gary Dupuy, AMEC
Project File

Subject: Quarterly Operation and Monitoring Summary – First Quarter 2013
Former J.H. Baxter & Co. Wood Treating Facility, Arlington, Washington
January 1, 2013, through March 31, 2013

This memorandum presents the monitoring and operation and maintenance (O&M) activities performed during the first quarter 2013 related to the Full-Scale Pilot System (system) at the former J.H. Baxter & Co. (Baxter) Wood Treating facility in Arlington, Washington. The first quarter 2013 summary covers the period from January 1 through March 31, 2013. The objective of the system is to create conditions favorable for biodegradation of pentachlorophenol (PCP) in groundwater by increasing the pH and dissolved oxygen (DO) concentration of groundwater. The system consists of seven extraction wells and a downgradient infiltration gallery, both in a chevron pattern (Figure 1). The infiltration gallery is backfilled with crushed limestone. Groundwater pH and DO increase as groundwater infiltrates through the limestone and seeps into the subgrade. The system also includes five source-area recovery wells that remove light nonaqueous-phase liquid (LNAPL) by means of sorbent socks installed inside the wells (Figure 1).

Routine monitoring tasks are performed quarterly and consist of recording groundwater level readings from the monitoring well network; inspecting the LNAPL-sorbent socks in the recovery wells and replacing the saturated ones; collecting a composite groundwater sample from the system extraction wells; and analyzing the composite groundwater sample for PCP and several degradation products.

MONITORING

The first quarter 2013 groundwater monitoring event was conducted from February 10th to February 12th 2013. Depth-to-groundwater measurements indicated an increase in groundwater elevations for all monitoring wells located at the facility.

Table 1 presents a summary of groundwater elevations from February 2012 through February 2013; Table 2 provides the groundwater elevations for the same time period along with the depth-to-groundwater measurements, the total changes in groundwater elevations since installation of the pilot system (excluding MW-38 through MW-43), as well as incremental changes since the previous measurement.

Figure 2 presents the February 2013 groundwater elevation contour map. Figure 3 presents a contour map of groundwater elevation differentials between the baseline elevations (January 28, 2008, prior to the system startup) and elevations measured in February 2013. The differential

groundwater elevation contour map was generated by subtracting groundwater elevation measured during the monitoring event from the baseline groundwater elevation at each well location. An interpolation scheme (kriging) was used to generate the contours based on the differential value at each well.

Figures 4 and 5 show cross sections of measured and baseline groundwater elevations along two transects for the monitoring event; the transect locations are shown on Figure 2. The cross sections also provide evidence of the direction of vertical hydraulic gradients within well pairs and well triplets. Wells were assigned one of three different well classifications developed to evaluate vertical gradients at each well cluster:

- Shallow wells – wells with bottom-of-screen elevations higher than 90 feet (ft) above mean sea level (msl; North American Vertical Datum of 1988 [NAVD 88]);
- Intermediate wells – wells with bottom-of-screen elevations between 70 and 90 ft msl; and
- Deep wells – wells with bottom-of-screen elevations below 70 ft msl.

A well classification approach using depth below ground surface was not used.

The cross section on Figure 5 indicates an upward vertical gradient at the MW-25/MW-32 well pair for the first time during system operation. Minimal vertical head gradients are observed immediately downgradient of the infiltration gallery (MW-3/MW-33) and at the MW-29/MW-34/MW-38 well triplet, which indicates that the gradient observed at MW-25/MW-32 dissipates rapidly in the direction of groundwater flow. Downward vertical gradients were observed at well pairs located downgradient of the EW-1/EW-4 extraction well line (MW-15/MW-40 and MW-37/MW-41). Vertical groundwater gradients for facility well pairs are summarized in Table 3.

Figure 6 provides a trend plot of vertical gradients for six well pairs, where a positive gradient indicates downward groundwater flow and a negative gradient indicates upward flow. With the exception of well pair MW-25/MW-32, the magnitude and direction of vertical gradients at facility well pairs and triplets remained consistent with those observed during the previous quarter (Figure 6; Table 3). The MW-25/MW-32 gradient difference could be a result of system downtime prior to the groundwater monitoring event.

Figures 7 through 26 present hydrographs for each well in the groundwater monitoring network, as well as a bar graph of daily precipitation for the corresponding time period. Daily precipitation data are acquired on a quarterly basis from the National Climatic Data Center (NCDC).

Precipitation data from previous quarters are presented along with the well hydrographs. The NCDC precipitation data set provides cumulative estimates of rainfall and snowmelt; snowfall is not included in the precipitation data. Average daily precipitation for the interval between groundwater monitoring events is shown as a line graph overlying the bar graph. If rainfall totals are missing from the NCDC data set, the omitted data points are treated as zero values on the hydrographs and are omitted in the calculation of the monthly average.

The hydrographs indicate a correlation between groundwater elevation and precipitation. For all groundwater monitoring wells, the groundwater elevation increased between the November and February monitoring events. As during previous quarters, the observed fluctuations in groundwater elevations are likely due to variation in precipitation and groundwater recharge during the reporting period.

A composite groundwater sample was prepared from discrete samples collected from extraction wells EW-2 through EW-4 during the monitoring event. Extraction wells EW-5 and EW-6 were shut down during the first quarter of 2011 due to a high water level in the infiltration gallery, and groundwater from these wells is therefore not included within the composite sample. EW-1 was also off due to recurring high water alarms. The composite sample was prepared by combining an equal volume of groundwater from each extraction well using a measuring cup. The composite samples from the extraction wells are analyzed for PCP and, since March 2009, select PCP degradation products.

The analytical results for composite samples collected from February 2012 through February 2013 are shown in Table 4. During this reporting period, the PCP concentration was 820 micrograms per liter. The concentration of degradation product 2,4,5-trichlorophenol was below the method reporting limit (MRL) for the composite sample collected during this reporting period. The concentrations of 2,4,6-trichlorophenol and of total tetrachlorophenols, which includes tetrachlorophenol isomers 2,3,4,6-tetrachlorophenol and 2,3,5,6-tetrachlorophenol, were also below their respective method reporting limits.

MAINTENANCE

The sorbent socks in the five recovery wells were inspected on February 12, 2013, and the sock in MW-12 was replaced. A total mass of 1.97 pounds of LNAPL was removed from recovery well MW-12.

The amount of LNAPL removed was determined by subtracting the mass of an unused sock from the mass of the spent sock using a laboratory scale. The socks in recovery wells MW-13, MW-19, MW-20, and MW-21 did not require replacement. Since implementation of the pilot study, the socks in these recovery wells have become saturated with LNAPL less frequently than the sock in MW-12.

The manufacturer's information indicates that each sock is capable of absorbing 2 pounds of product. Baxter coordinates with Stella-Jones (the current operator of the wood-treating facility) to have the spent socks shipped off-site along with waste produced by Stella-Jones as part of facility operations.

The system produced frequent high water alarms during the first quarter of 2013. After a shutdown on January 1, the pressures at EW-2, 3, and 4 were set to 55 psi, 58 psi, and 85 psi respectively. These pressures correspond to respective flow rates of 5 gpm, 5 gpm, and 14 gpm. The system was restarted on January 3rd, but shut down again on January 4th. The backpressure on EW-4 was increased to 88psi, dropping the flow rate by approximately one gpm, when the well was restarted on January 10th. Another shutdown occurred on January 11th due to a high water alarm.

The system stayed on for two days after a restart on January 17th and then again for three days after a system restart on January 25th. During a January 30th system restart, the backpressure at EW-4 was again raised, this time to 90 psi. The system shut down again on February 1st. After two more one-day restart periods, the system shut down on February 13th and was left off for the rest of the first quarter 2013 while infiltration gallery rehabilitation options were considered.

Attachments: Tables 1 through 4
Figures 1 through 26

TABLES

TABLE 1
GROUNDWATER ELEVATIONS SUMMARY
Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Well Identification	Northing	Easting	Ground Surface Elevation (feet)	Groundwater Elevations (feet) ¹				
				Baseline 1/28/08 ²	2/12/12	4/29/12	8/19/12	11/11/12
BXS-1	427577.0	1320372.8	142.32	--	109.84	113.71	111.76	108.65
BXS-2	427429.1	1320176.6	141.09	106.63	111.67	115.92	114.02	110.89
BXS-3	427202.9	1320143.8	141.73	109.82	115.03	119.94	117.43	114.07
BXS-4	426556.4	1320865.9	143.05	132.10	132.27	133.42	130.07	131.32
HC-MW-5	427010.1	1320692.3	143.94	120.42	121.22	124.32	120.59	118.95
HC-MW-6	427887.2	1320815.7	146.69	106.84	110.85	115.36	112.42	111.96
HC-MW-7	428230.4	1320337.6	145.01	102.67	106.54	110.74	108.81	105.73
MW-1	427352.2	1320826.9	146.21	124.33	124.59	125.53	122.53	122.64
MW-2	428166.9	1320647.4	144.69	103.68	107.69	112.1	109.75	106.51
MW-3	427560.7	1320596.2	143.92	106.87	110.68	114.57	112.28	109.18
MW-4	425935.6	1321013.3	143.02	135.54	136.24	135.89	132.25	135.15
MW-10	427175.1	1320566.0	143.30	114.90	118.09	122.73	119.15	115.79
MW-11	427398.1	1321001.0	146.46	125.74	125.82	126.52	123.44	124.36
MW-14	425602.6	1320388.9	139.88	119.98	122.83	126.21	121.75	119.20
MW-15	427860.0	1320310.6	142.78	104.72	108.57	112.64	110.79	107.62
MW-16	428006.8	1320325.6	143.37	103.91	107.80	111.99	110.16	106.91
MW-17	427863.6	1320173.9	142.17	104.47	108.30	112.39	110.60	107.45
MW-18	428312.7	1320075.7	142.79	102.05	105.92	109.95	108.44	105.30
MW-22	427395.3	1320573.5	143.13	108.72	113.21	116.85	114.73	111.96
MW-23	427500.0	1320578.2	143.47	107.50	112.07	115.68	113.37	110.53
MW-24	427563.9	1320645.1	144.47	107.02	110.87	114.78	112.42	109.33
MW-25	427492.9	1320682.0	145.45	109.06	114.98	118.51	116.27	113.63
MW-26	427601.0	1320773.0	145.13	107.48	111.20	115.30	112.75	109.55
MW-27	427677.9	1320702.8	144.62	107.01	110.80	114.86	112.42	109.31
MW-28	427502.3	1320488.8	143.02	107.01	111.31	115.09	112.86	109.92
MW-29	427637.7	1320503.0	142.85	106.33	110.18	114.02	111.81	108.79
MW-30	427836.7	1320483.2	142.64	105.47	109.26	113.4	111.39	108.16
MW-31	427715.8	1320294.0	141.15	105.23	109.05	113.1	111.16	108.03
MW-32	427493.5	1320670.2	145.27	107.36	111.16	115.09	112.69	109.58
MW-33	427577.4	1320602.0	143.76	106.87	110.67	114.61	112.34	109.21
MW-34	427647.7	1320498.6	143.02	106.29	110.14	113.94	111.75	108.70
MW-35	427726.8	1320608.7	144.34	106.36	110.27	114.24	111.90	108.89
MW-36	427676.1	1320399.4	141.57	105.60	109.34	113.5	111.40	108.22
MW-37	427969.4	1320251.9	142.37	104.16	108.01	112.05	110.35	107.16
MW-38 ⁶	427653.6	1320491.4	143.36	NA	110.03	113.87	111.77	108.69
								116.13

TABLE 1
GROUNDWATER ELEVATIONS SUMMARY
Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Well Identification	Northing	Easting	Ground Surface Elevation (feet)	Groundwater Elevations (feet) ¹					
				Baseline 1/28/08 ²	2/12/12	4/29/12	8/19/12	11/11/12	2/10/13
MW-39 ⁶	427993.1	1320148.9	142.73	NA	107.41	111.44	109.72	106.6	113.31
MW-40 ⁶	427859.5	1320316.6	142.56	NA	108.13	112.33	110.22	107	114.13
MW-41 ⁶	427968.1	1320255.0	142.33	NA	107.65	111.71	109.93	106.81	113.62
MW-42 ⁶	428319.7	1320080.9	142.89	NA	105.78	109.87	108.23	105.13	111.72
MW-43 ⁷	428757.5	1319841.1	141.91	NA	102.83	106.76	105.5 ⁸	102.52	108.11

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
3. May 2011 depth to water measurements at BXS-2, BXS-3, MW-18, MW-26, MW-33, MW-42, and MW-43 recorded on 5/16/11.
4. A suspected incorrect depth to water measurement occurred at MW-15. Therefore, the 2nd Quarter 2011 groundwater elevation at MW-15 was estimated by calculating the average elevation difference between MW-15 and MW-40 for the 3rd Quarter 2010 through the 1st Quarter 2011 and adding the difference to the 2nd Quarter 2011 groundwater elevation measured at MW-40.
5. The groundwater elevation indicated for MW-15 was raised by 1 foot from the value recorded in the field due to a suspected error in field recording.
6. Monitoring wells MW-38 through MW-42 were installed in July 2010.
7. Monitoring well MW-43 was installed in October 2010.
8. Groundwater elevation measure on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Groundwater below level of dedicated pump.
NA = not applicable

TABLE 2

WATER LEVEL READINGS¹
 Former J.H. Baxter & Co. Wood Treating Facility
 Arlington, Washington

Date	BXS-1 ^{2,3} - TOC Elevation: 142.65					BXS-2 ³ - TOC Elevation: 142.89					BXS-3 - TOC Elevation: 142.07					BXS-4 - TOC Elevation: 143.42					HC-MW-5 - TOC Elevation: 143.75				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	8:41	Below Pump	--	0	Below Pump	8:22	36.26	0.00	0.00	106.63	8:30	32.25	0.00	0.00	109.82	11:51	11.32	0.00	0.00	132.10	15:15	23.33	0.00	0.00	120.42
2/12/2012	14:16	32.81	--	1.20	109.84	14:18	31.22	5.04	0.78	111.67	14:21	27.04	5.21	0.73	115.03	15:08	11.15	0.17	3.38	132.27	15:26	22.53	0.80	3.42	121.22
4/29/2012	14:16	28.94	--	3.87	113.71	14:18	26.97	9.29	4.25	115.92	14:21	22.13	10.12	4.91	119.94	15:08	10.00	1.32	1.15	133.42	15:26	19.43	3.90	3.10	124.32
8/19/2012	15:18	30.89	--	-1.95	111.76	15:20	28.87	7.39	-1.90	114.02	15:25	24.64	7.61	-2.51	117.43	14:47	13.35	-2.03	-3.35	130.07	14:44	23.16	0.17	-3.73	120.59
11/11/2012	15:32	34.00	--	-3.11	108.65	15:34	32.00	4.26	-3.13	110.89	15:37	28.00	4.25	-3.36	114.07	15:15	12.10	-0.78	1.25	131.32	15:02	24.80	-1.47	-1.64	118.95
2/10/2013	14:20	26.75	--	7.25	115.90	14:22	25.13	11.13	6.87	117.76	14:25	19.76	12.49	8.24	122.31	13:53	8.88	2.44	3.22	134.54	14:08	16.96	6.37	7.84	126.79

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated
 ft = feet
 TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	HC-MW-6 - TOC Elevation: 146.36					HC-MW-7 - TOC Elevation: 144.73					MW-1 - TOC Elevation: 147.44					MW-2 - TOC Elevation: 145.96					MW-3 ³ - TOC Elevation: 146.13				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	11:05	39.52	0.00	0.00	106.84	14:19	42.06	0.00	0.00	102.67	12:05	23.11	0.00	0.00	124.33	14:23	42.28	0.00	0.00	103.68	10:22	39.26	0.00	0.00	106.87
2/12/2012	15:19	35.51	4.01	1.78	110.85	13:37	38.19	3.87	0.85	106.54	15:23	22.85	0.26	4.31	124.59	14:04	38.27	4.01	1.15	107.69	14:52	35.45	3.81	1.55	110.68
4/29/2012	15:19	31.00	8.52	4.51	115.36	13:37	33.99	8.07	4.20	110.74	15:23	21.91	1.20	0.94	125.53	14:04	33.86	8.42	4.41	112.10	14:52	31.56	7.70	3.89	114.57
8/19/2012	14:18	33.94	5.58	-2.94	112.42	13:17	35.92	6.14	-1.93	108.81	14:40	24.91	-1.80	-3.00	122.53	14:36	36.21	6.07	-2.35	109.75	13:47	33.85	5.41	-2.29	112.28
11/11/2012	14:55	34.40	5.12	-0.46	111.96	13:01	39	3.06	-3.08	105.73	15:00	24.80	-1.69	0.11	122.64	13:42	39.45	2.83	-3.24	106.51	13:51	36.95	2.31	-3.10	109.18
2/10/2013	13:35	28.23	11.29	6.17	118.13	12:37	31.75	10.31	7.25	112.98	13:40	20.56	2.55	4.24	126.88	13:30	31.31	10.97	8.14	114.65	13:05	29.16	10.10	7.79	116.97

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

- = Data point was either not measured or not calculated
ft = feet
TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-4 - TOC Elevation: 145.02					MW-10 - TOC Elevation: 144.99					MW-11 - TOC Elevation: 146.06					MW-14 - TOC Elevation: 141.70					MW-15 - TOC Elevation: 142.22				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	11:37	9.48	0.00	0.00	135.54	12:15	30.09	0.00	0.00	114.90	11:59	20.32	0.00	0.00	125.74	11:45	21.72	0.00	0.00	119.98	13:47	37.50	0.00	0.00	104.72
2/12/2012	15:05	8.78	0.70	4.17	136.24	15:30	26.90	3.19	2.25	118.09	15:15	20.24	0.08	8.91	125.82	15:01	18.87	2.85	5.48	122.83	13:44	33.65	3.85	0.93	108.57
4/29/2012	15:05	9.13	0.35	-0.35	135.89	15:30	22.26	7.83	4.64	122.73	15:15	19.54	0.78	0.70	126.52	15:01	15.49	6.23	3.38	126.21	13:44	29.58	7.92	4.07	112.64
8/19/2012	14:50	12.77	-3.29	-3.64	132.25	14:58	25.84	4.25	-3.58	119.15	15:05	22.62	-2.30	-3.08	123.44	14:54	19.95	1.77	-4.46	121.75	13:21	31.43	6.07	-1.85	110.79
11/11/2012	15:07	9.87	-0.39	2.90	135.15	15:21	29.20	0.89	-3.36	115.79	15:17	21.70	-1.38	0.92	124.36	15:11	22.50	-0.78	-2.55	119.20	13:05	34.60	2.90	-3.17	107.62
2/10/2013	14:01	7.96	1.52	1.91	137.06	14:14	19.81	10.28	9.39	125.18	13:42	18.30	2.02	3.40	127.76	14:05	13.61	8.11	8.89	128.09	12:44	27.53	9.97	7.07	114.69

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹
 Former J.H. Baxter & Co. Wood Treating Facility
 Arlington, Washington

Date	MW-16 - TOC Elevation: 142.91					MW-17 - TOC Elevation: 144.85					MW-18 - TOC Elevation: 142.45					MW-22 - TOC Elevation: 142.75					MW-23 - TOC Elevation: 143.18				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	13:57	39.00	0.00	0.00	103.91	13:52	40.38	0.00	0.00	104.47	14:14	40.40	0.00	0.00	102.05	10:10	34.03	0.00	0.00	108.72	10:02	35.68 ⁶	0.00	0.00	107.50
2/12/2012	13:34	35.11	3.89	0.84	107.80	13:41	36.55	3.83	0.80	108.30	14:10	36.53	3.87	0.64	105.92	14:29	29.54	4.49	1.14	113.21	14:26	31.11	4.57	1.44	112.07
4/29/2012	13:34	30.92	8.08	4.19	111.99	13:41	32.46	7.92	4.09	112.39	14:10	32.5	7.90	4.03	109.95	14:29	25.90	8.13	3.64	116.85	14:26	27.50	8.18	3.61	115.68
8/19/2012	13:14	32.75	6.25	-1.83	110.16	13:26	34.25	6.13	-1.79	110.60	14:30	34.01	6.39	-1.51	108.44	13:45	28.02	6.01	-2.12	114.73	13:43	29.81	5.88	-2.31	113.37
11/11/2012	12:58	36	3.00	-3.25	106.91	13:35	37.40	2.98	-3.15	107.45	8:21	37.15	3.25	-3.14	105.30	13:27	30.79	3.24	-2.77	111.96	13:25	32.65	3.03	-2.84	110.53
2/10/2013	12:35	28.81	10.19	7.19	114.10	12:41	30.61	9.77	6.79	114.24	N/A	30.63	9.77	6.52	111.82	14:16	24.12	9.91	6.67	118.63	13:03	25.40	10.28	7.25	117.78

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

- = Data point was either not measured or not calculated
 ft = feet
 TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-24 - TOC Elevation: 144.13					MW-25 - TOC Elevation: 144.98					MW-26 - TOC Elevation: 144.75					MW-27 - TOC Elevation: 144.31					MW-28 - TOC Elevation: 142.77				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	10:25	37.11	0.00	0.00	107.02	10:28	35.92	0.00	0.00	109.06	10:54	37.27	0.00	0.00	107.48	10:41	37.30	0.00	0.00	107.01	9:47	35.76	0.00	0.00	107.01
2/12/2012	14:56	33.26	3.85	1.58	110.87	14:35	30.00	5.92	0.99	114.98	14:41	33.55	3.72	1.70	111.20	14:44	33.51	3.79	1.52	110.80	14:14	31.46	4.30	1.44	111.31
4/29/2012	14:56	29.35	7.76	3.91	114.78	14:35	26.47	9.45	3.53	118.51	14:41	29.45	7.82	4.10	115.30	14:44	29.45	7.85	4.06	114.86	14:14	27.68	8.08	3.78	115.09
8/19/2012	14:21	31.71	5.40	-2.36	112.42	14:09	28.71	7.21	-2.24	116.27	14:04	32.00	5.27	-2.55	112.75	13:58	31.89	5.41	-2.44	112.42	15:15	29.91	5.85	-2.23	112.86
11/11/2012	13:50	34.80	2.31	-3.09	109.33	13:31	31.35	4.57	-2.64	113.63	14:39	35.20	2.07	-3.20	109.55	13:44	35.00	2.30	-3.11	109.31	15:30	32.85	2.91	-2.94	109.92
2/10/2013	N/A	27.10	10.01	7.70	117.03	13:21	27.60	8.32	3.75	117.38	13:15	26.99	10.28	8.21	117.76	13:13	27.00	10.30	8.00	117.31	14:18	25.45	10.31	7.40	117.32

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-29 - TOC Elevation: 142.61					MW-30 - TOC Elevation: 142.40					MW-31 - TOC Elevation: 140.95					MW-32 - TOC Elevation: 145.01					MW-33 - TOC Elevation: 143.46				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	14:46	36.28	0.00	0.00	106.33	13:28	36.93	0.00	0.00	105.47	13:42	35.72	0.00	0.00	105.23	10:32	37.65	0.00	0.00	107.36	10:17	36.59	0.00	0.00	106.87
2/12/2012	14:00	32.43	3.85	1.53	110.18	13:52	33.14	3.79	1.11	109.26	13:49	31.90	3.82	1.00	109.05	14:32	33.85	3.80	1.62	111.16	14:50	32.79	3.80	1.54	110.67
4/29/2012	14:00	28.59	7.69	3.84	114.02	13:52	29.00	7.93	4.14	113.40	13:49	27.85	7.87	4.05	113.10	14:32	29.92	7.73	3.93	115.09	14:50	28.85	7.74	3.94	114.61
8/19/2012	13:40	30.80	5.48	-2.21	111.81	13:31	31.01	5.92	-2.01	111.39	13:29	29.79	5.93	-1.94	111.16	14:12	32.32	5.33	-2.40	112.69	13:50	31.12	5.47	-2.27	112.34
11/11/2012	13:21	33.82	2.46	-3.02	108.79	13:14	34.24	2.69	-3.23	108.16	13:10	32.92	2.80	-3.13	108.03	13:29	35.43	2.22	-3.11	109.58	13:49	34.25	2.34	-3.13	109.21
2/10/2013	13:00	26.30	9.98	7.52	116.31	12:52	26.85	10.08	7.39	115.55	12:50	25.77	9.95	7.15	115.18	13:18	24.91	12.74	10.52	120.10	13:06	26.51	10.08	7.74	116.95

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-34 - TOC Elevation: 142.60					MW-35 - TOC Elevation: 143.89					MW-36 - TOC Elevation: 141.15					MW-37 - TOC Elevation: 141.96					MW-38 ⁴ - TOC Elevation: 143.28				
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation
Baseline 1/28/2008	14:51	36.31	0.00	0.00	106.29	11:12	37.53	0.00	0.00	106.36	13:41	35.55	0.00	0.00	105.60	14:05	37.80 ⁶	0.00	0.00	104.16	--	--	--	--	--
2/12/2012	13:57	32.46	3.85	1.52	110.14	14:47	33.62	3.91	1.51	110.27	13:00	31.81	3.74	1.10	109.34	13:27	33.95	3.85	0.87	108.01	13:55	33.25	--	1.45	110.03
4/29/2012	13:57	28.66	7.65	3.80	113.94	14:47	29.65	7.88	3.97	114.24	13:00	27.65	7.90	4.16	113.50	13:27	29.91	7.89	4.04	112.05	13:55	29.41	--	3.84	113.87
8/19/2012	13:38	30.85	5.46	-2.19	111.75	13:55	31.99	5.54	-2.34	111.90	12:45	29.75	5.80	-2.10	111.40	12:58	31.61	6.20	-1.70	110.35	13:35	31.51	--	-2.10	111.77
11/11/2012	13:18	33.90	2.41	-3.05	108.70	13:46	35.00	2.53	-3.01	108.89	12:33	32.93	2.62	-3.18	108.22	12:51	34.8	3.00	-3.19	107.16	13:16	34.59	--	-3.08	108.69
2/10/2013	12:58	26.30	10.01	7.60	116.30	13:08	27.29	10.24	7.71	116.60	12:00	25.50	10.05	7.43	115.65	12:30	27.92	9.88	6.88	114.04	12:55	27.15	--	7.44	116.13

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 2

WATER LEVEL READINGS¹

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Date	MW-39 ⁴ - TOC Elevation: 142.85					MW-40 ⁴ - TOC Elevation: 142.10					MW-41 ⁴ - TOC Elevation: 142.21					MW-42 ⁴ - TOC Elevation: 142.68					MW-43 ⁵ - TOC Elevation: 141.51					
	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	Time	Depth below TOC (ft)	Total Change in Level (ft)	Incremental Change in Level (ft)	Water Level Elevation	
Baseline 1/28/2008	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
2/12/2012	13:30	35.44	--	0.79	107.41	13:46	33.97	--	1.00	108.13	13:14	34.56	--	0.84	107.65	14:06	36.90	--	0.60	105.78	14:06	38.68	--	0.29	102.83	
4/29/2012	13:30	31.41	--	4.03	111.44	13:46	29.77	--	4.20	112.33	13:14	30.50	--	4.06	111.71	14:06	32.81	--	4.09	109.87	14:06	34.75	--	3.93	106.76	
8/19/2012	13:02	33.13	--	-1.72	109.72	13:24	31.88	--	-2.11	110.22	12:40	32.28	--	-1.78	109.93	14:29	34.45	--	-1.64	108.23	8:53	36.01 ⁷	--	-1.27	105.49	
11/11/2012	12:54	36.25	--	-3.12	106.60	13:07	35.10	--	-3.22	107.00	12:35	35.40	--	-3.12	106.81	8:00	37.55	--	-3.10	105.13	7:45	38.99	--	-2.98	102.52	
2/10/2013	12:32	29.54	--	6.71	113.31	12:47	27.97	--	7.13	114.13	12:02	28.59	--	6.81	113.62	7:40	30.96	--	6.59	111.72	8:30	33.4	--	5.59	108.11	

Notes

1. Groundwater elevations in feet specified relative to North American Vertical Datum of 1988 (NAVD88).
2. Depth to pump is 36.9 feet.
3. Surveyors identified elevation from the top of the steel lid on the aboveground monuments. Reported elevations were decreased to reflect top of casing elevation by subtracting the difference in elevation from the lid to the top of casing measured using a pocket measuring tape.
4. Monitoring wells MW-38 through MW-42 were installed in July 2010.
5. Monitoring well MW-43 was installed in October 2010.
6. Elevations indicated for MW-23 and MW-37 on 1/28/2008 are raised by 1 foot from values recorded in the field due to suspected error in field recording.
7. Groundwater elevation measured on 8/20/12 due to well location in closed maintenance yard.

Abbreviations

-- = Data point was either not measured or not calculated

ft = feet

TOC = top of casing

TABLE 3

VERTICAL GROUNDWATER GRADIENTS AT MONITORING WELL PAIRS ^{1, 2}

Former J.H. Baxter & Co. Wood Treating Facility

Arlington, Washington

Vertical Hydraulic Gradient	Well Pair					
		2/12/2012	4/29/2012	8/19/2012	11/11/2012	2/10/2013
Shallow / Intermediate	MW-25/MW-32	0.26	0.23	0.24	0.28	-0.19
	MW-3/MW-33	0.0006	-0.0025	-0.0038	-0.0019	0.0013
	MW-29/MW-34	0.003	0.005	0.004	0.006	0.001
Shallow / Deep	MW-29/MW-38	0.0044	0.0044	0.0012	0.0029	0.0052
	MW-15/MW-40	0.012	0.008	0.015	0.016	0.015
Intermediate / Deep	MW-37/MW-41	0.014	0.014	0.017	0.014	0.017

Notes

1. Vertical groundwater gradients are dimensionless.
2. Gradients are calculated as shallower well groundwater elevation minus deeper well groundwater elevation divided by the distance between well screen midpoints. Positive values indicate a downward flow direction, while negative values indicate an upward flow direction.
3. The vertical groundwater gradient calculated for MW-15/MW-40 used a groundwater elevation value at MW-15 that was raised 1 ft from the value recorded in the field due to a suspected error in field

TABLE 4

**CONCENTRATIONS OF PCP AND PCP DEGRADATION PRODUCTS
IN EXTRACTION WELL COMPOSITE SAMPLES**

Former J.H. Baxter & Co. Wood Treating Facility
Arlington, Washington

Concentrations shown in micrograms per liter ($\mu\text{g/L}$)

Analyte	2/17/2012 ¹	5/2/2012 ¹	8/20/2012 ³	11/12/2012 ⁴	2/11/2013 ⁴
Pentachlorophenol	650	770	550 D	690	820
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	0.11 J	0.16 NJ, SC, DL	ND	ND	ND
2,3,4,6-Tetrachlorophenol	--	--	--	--	--
2,3,5,6-Tetrachlorophenol	--	--	--	--	--
3,4-Dichlorophenol	--	--	--	--	--
3,5-Dichlorophenol	--	--	--	--	--
Total Tetrachlorophenols ²	ND	39 J	ND	ND	ND

Notes

1. EPA method 8151M; the composite sample does not include groundwater from EW-5 through EW-7. Extraction wells EW-5 and EW-6 were shut down due to a recurring high water level condition in the infiltration trench.
2. Total tetrachlorophenols comprises multiple tetrachlorophenol isomers, including 2,3,4,6-tetrachlorophenol and 2,3,5,6-tetrachlorophenol.
3. EPA method 8151M; the composite sample does not include groundwater from EW-1 or EW-5 through EW-7. Extraction wells EW-1, EW-5, and EW-6 were shut down due to a recurring high water level condition in the infiltration trench.
4. Sample contains water from EW-2, EW-3, and EW-4.

Abbreviations

EPA = US Environmental Protection Agency

ND = not detected at method detection limit

NJ = The analysis has indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

SC = There was more than a 40% relative percent difference between the analytical results from the primary and confirmation analytical column.

D = The report result is from a dilution.

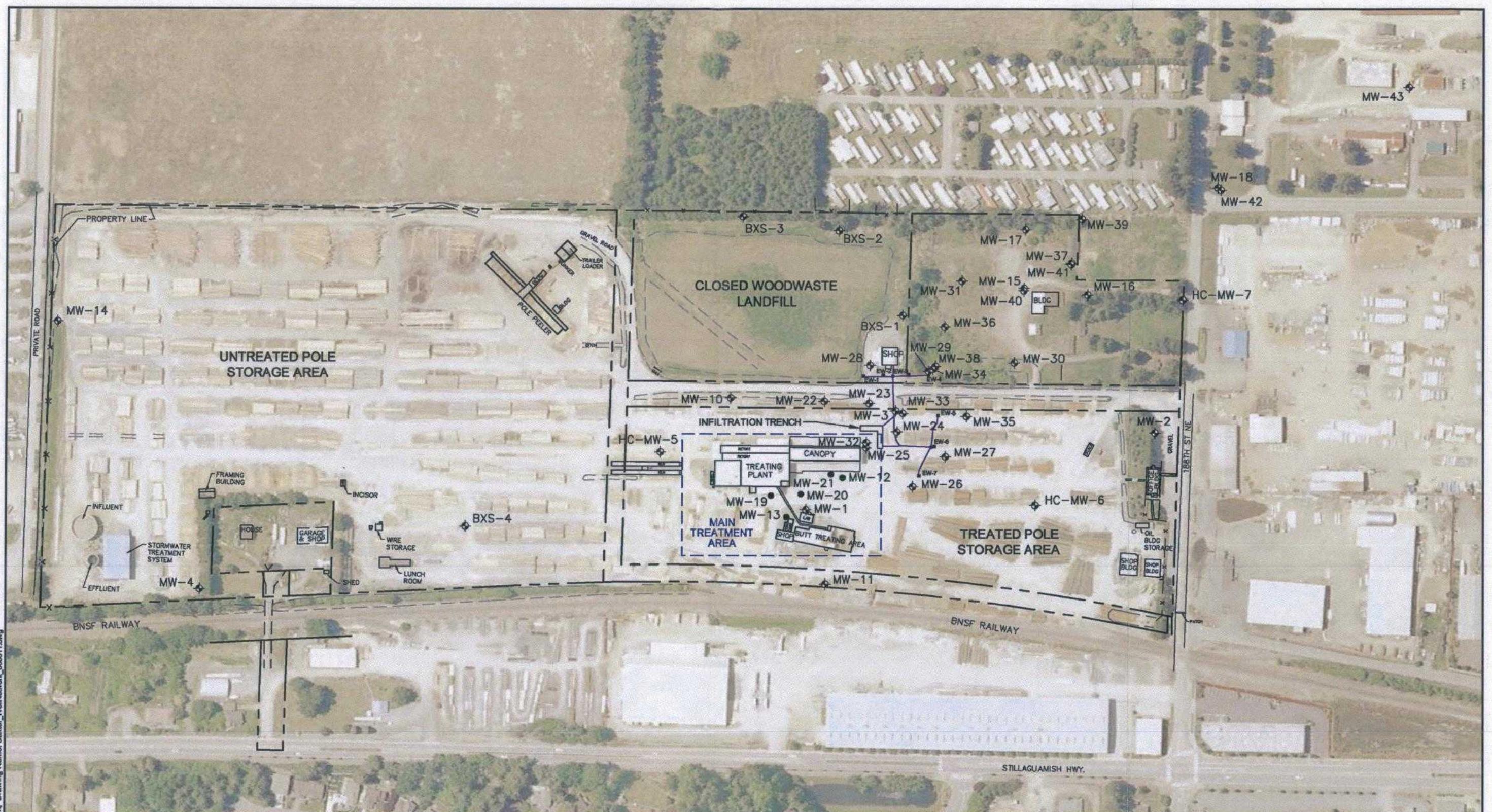
DL = The analyte concentration is between the method detection limit and the reporting limit.

PCP = pentachlorophenol

J = The result is an estimated value.

-- = Analysis not performed for constituent.

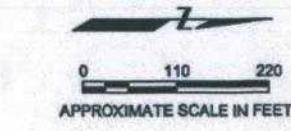
FIGURES



LEGEND

- MW-1 ◆ MONITORING WELL
- MW-12 ● LNAPL RECOVERY WELL
- EW-1 ■ EXTRACTION WELL AND VAULT IDENTIFYING NUMBER
- APPROXIMATE SITE BOUNDARY

LAYOUT OF GROUNDWATER RECIRCULATION PIPING

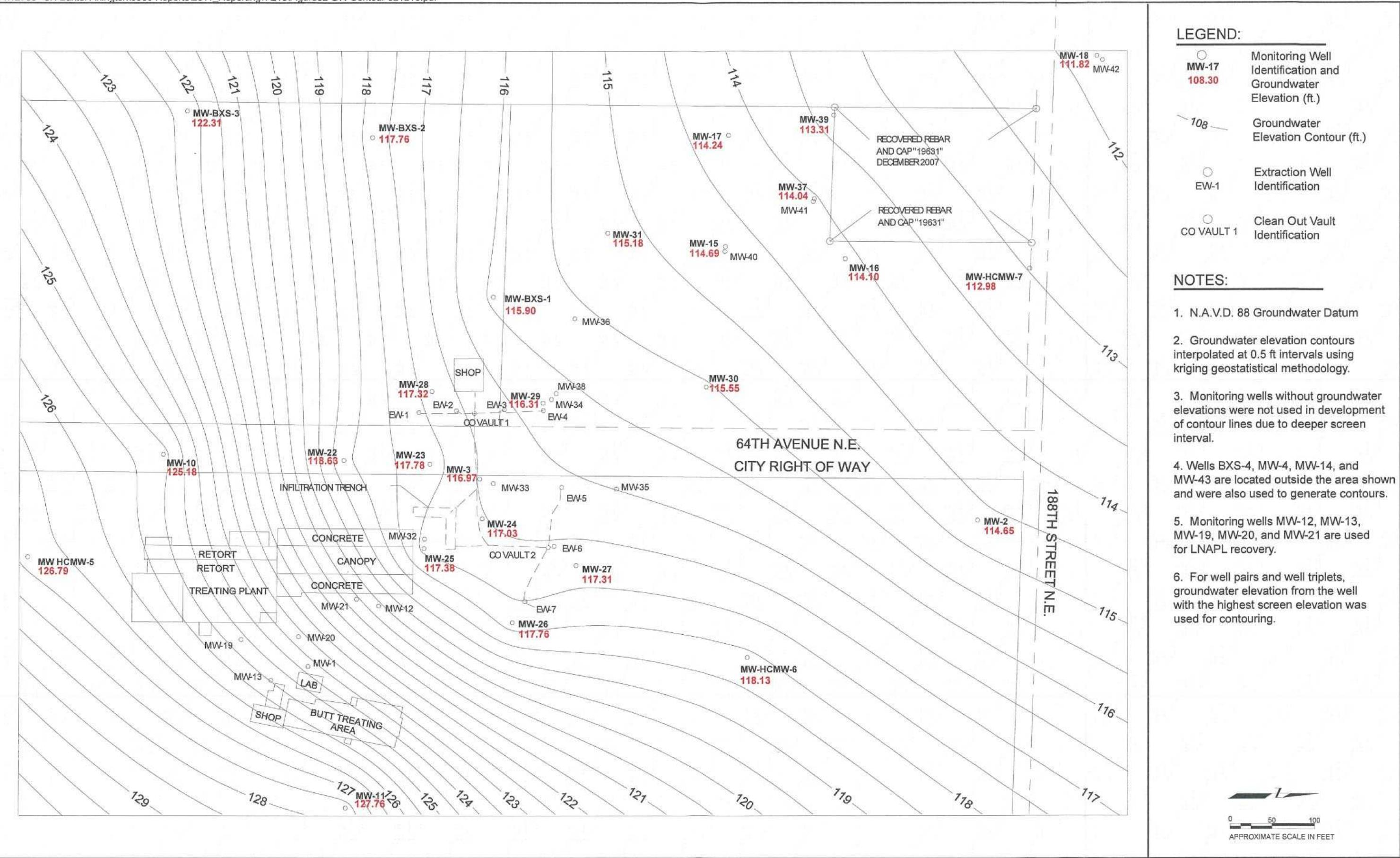


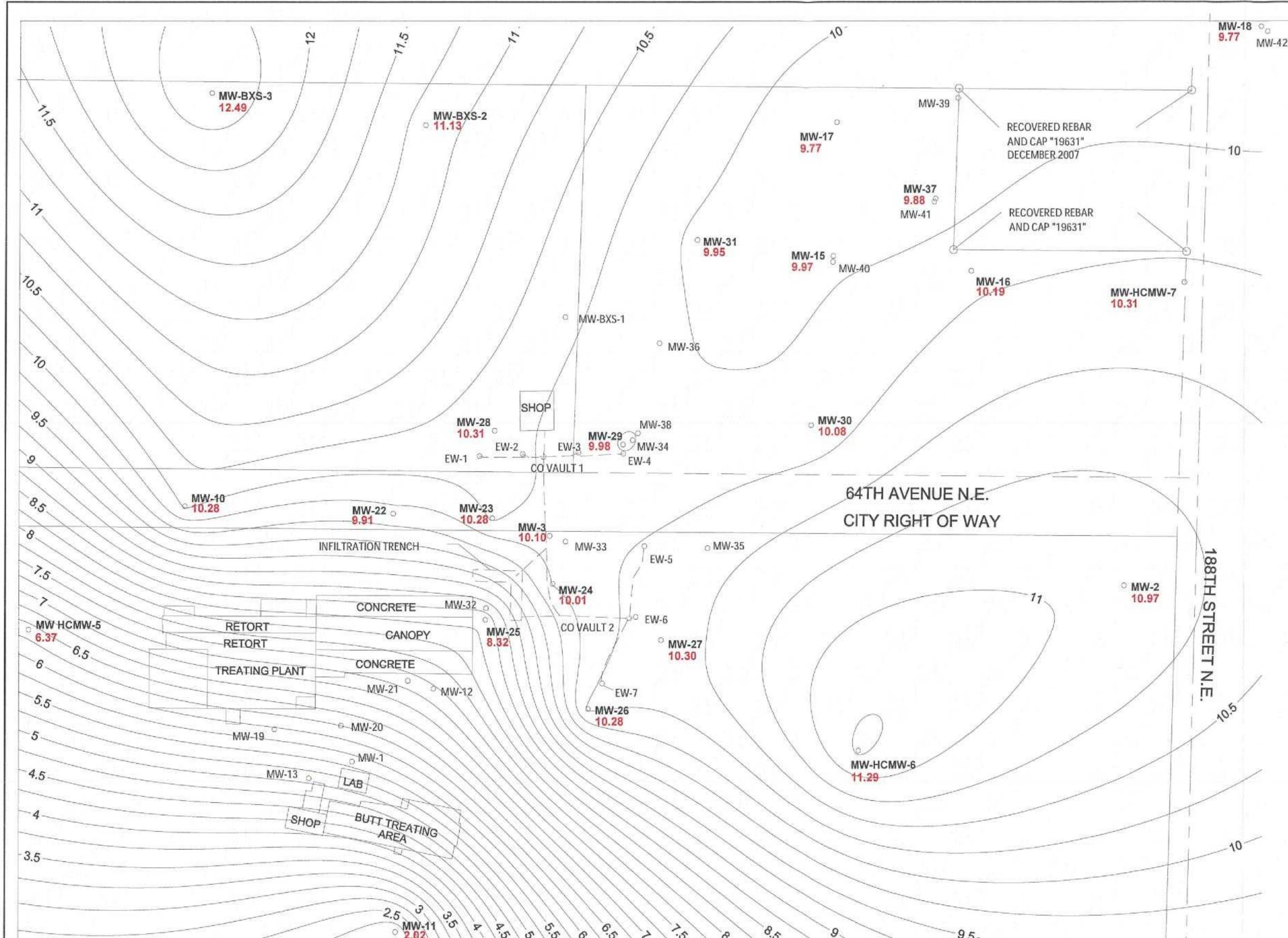
GROUNDWATER MONITORING NETWORK
Former J.H. Baxter and Co. Wood Treating Facility
Arlington, Washington

By: APS Date: 08/08/11 Project No. 0127060010

amec

Figure 1



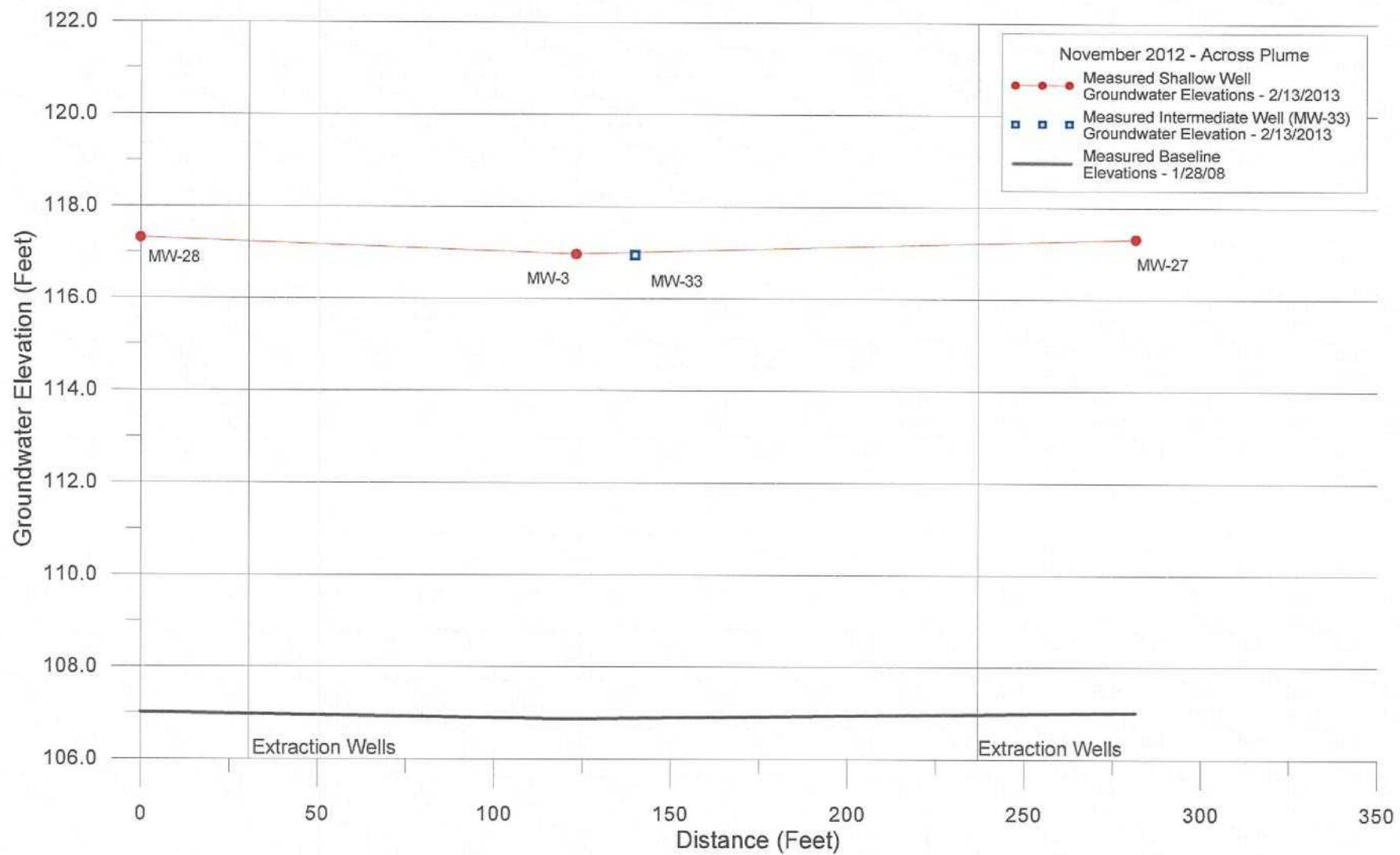
**LEGEND:**

- MW-17 (3.83) Monitoring Well Identification and Groundwater Differential (feet)
- 1.5 Groundwater Differential Contour (feet)
- EW-1 Extraction Well Identification
- CO VAULT 1 Clean Out Vault Identification

NOTES:

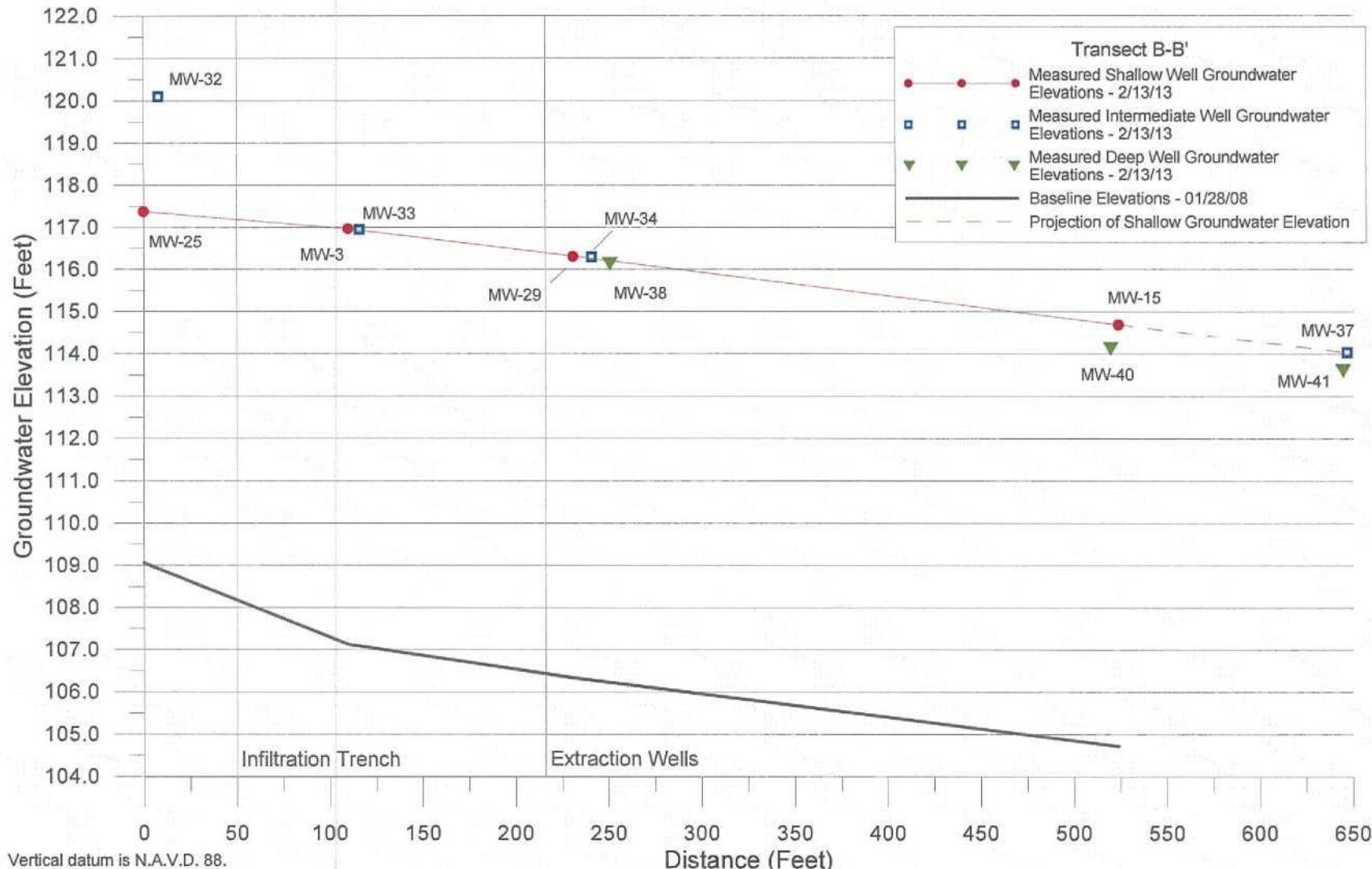
- Vertical Datum is N.A.V.D. 88
- Groundwater differential contours interpolated at 0.1 ft intervals using kriging geostatistical methodology.
- Monitoring wells without groundwater elevations were not used in development of differential lines due to deeper screen interval.
- Wells BXS-4, MW-4, and MW-14 are located outside the area shown and were also used to generate differentials.
- Monitoring wells MW-12, MW-13, MW-19, MW-20, and MW-21 are used for LNAPL recovery.
- Differential groundwater elevations were calculated by subtracting the measured elevations from the baseline elevations measured on January 28, 2008.





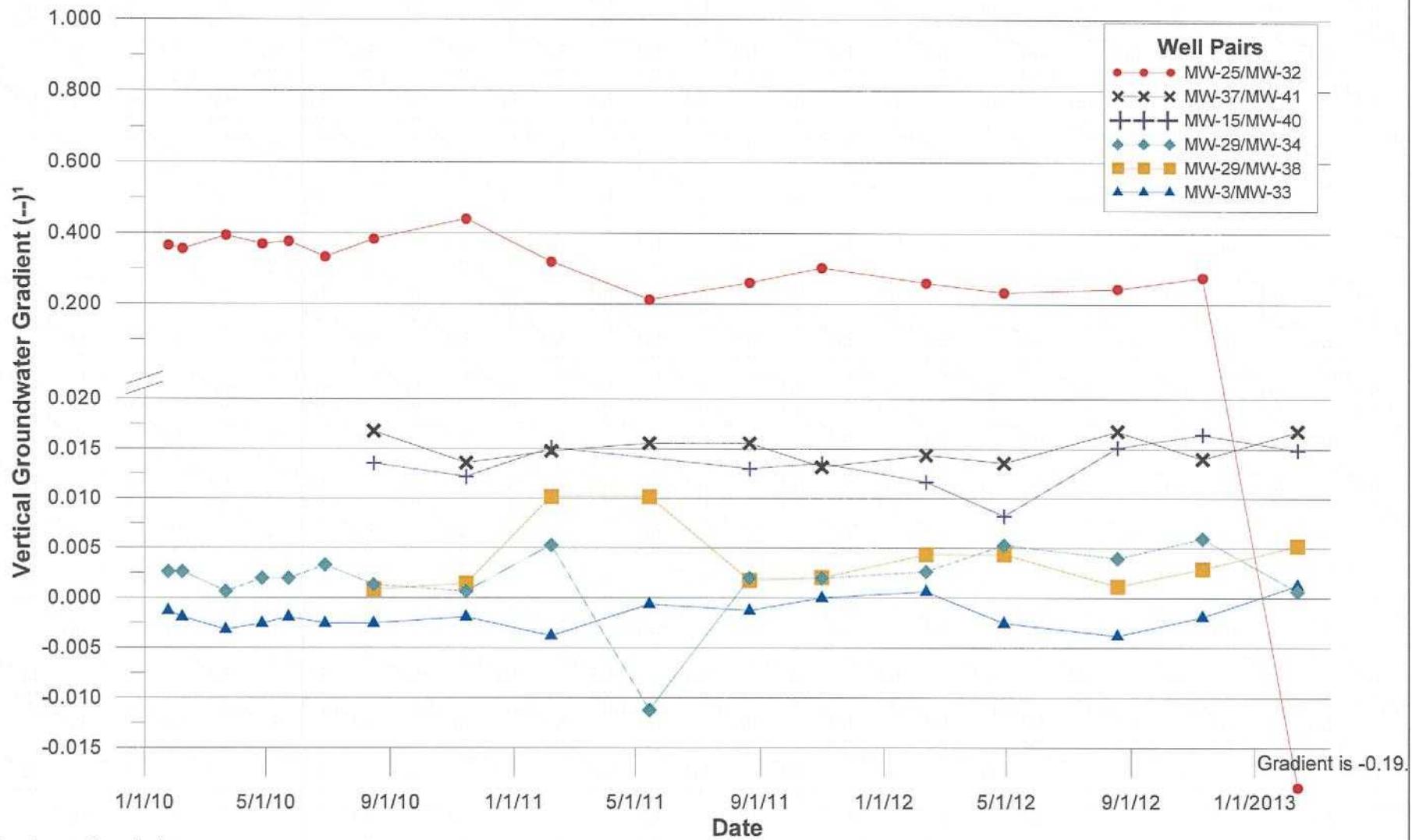
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Along transect A-A', well pair groundwater elevations generally coincide, indicating minimal vertical gradient in the vicinity of MW-3 and MW-33.
 3. Shallow wells are defined as wells with bottom-of-screen elevations above 90 feet mean sea level (msl). Intermediate wells are defined as wells with bottom-of-screen elevations between 70 and 90 feet msl.

amec	FIRST QUARTER 2013 MONITORING EVENT (FEBRUARY 2013) GROUNDWATER ELEVATION CROSS-SECTION A-A' Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By: ERO	Project No. 12706
		3/11/13	Figure No. 4



- Notes:
1. Vertical datum is N.A.V.D. 88.
 2. Along transect B-B', well pair groundwater elevations generally coincide except at MW-25/MW-32, indicating minimal vertical gradient. A silt layer is present at ~20 feet below ground surface in the vicinity of MW-25 and MW-32, which could account for the larger head differences observed at this well pair.
 3. Shallow wells are defined as wells with bottom-of-screen elevations above 90 feet mean sea level (msl). Intermediate wells are defined as wells with bottom-of-screen elevations between 70 and 90 feet msl. Deep wells are defined as wells with bottom-of-screen elevations below 70 feet msl.

	FIRST QUARTER 2013 MONITORING EVENT (FEBRUARY 2013) GROUNDWATER ELEVATION CROSS-SECTION B-B' Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO 3/11/13	12706 Figure No. 5



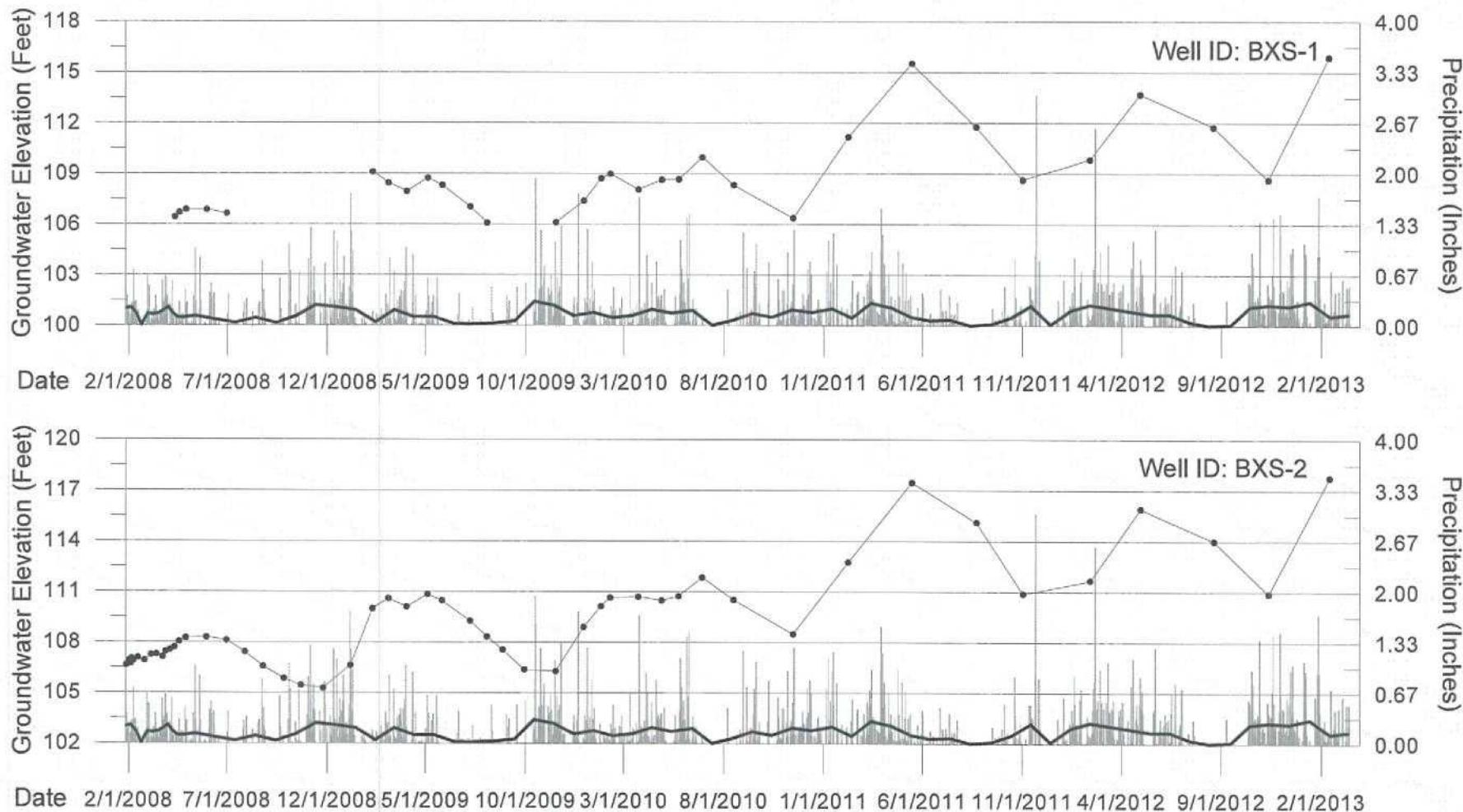
Notes: 1. -- = dimensionless
 2. Vertical datum is N.A.V.D 88.
 3. Gradients are calculated as shallower well groundwater elevation minus deeper well groundwater elevation divided by the distance between screen midpoints. Positive values indicate a downward flow direction, while negative values indicate an upward flow direction.



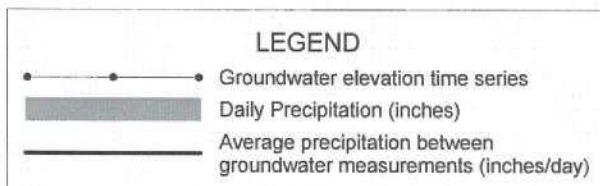
VERTICAL GROUNDWATER GRADIENT TRENDS

Former J.H. Baxter and Co. Wood Treating Facility
Arlington, Washington

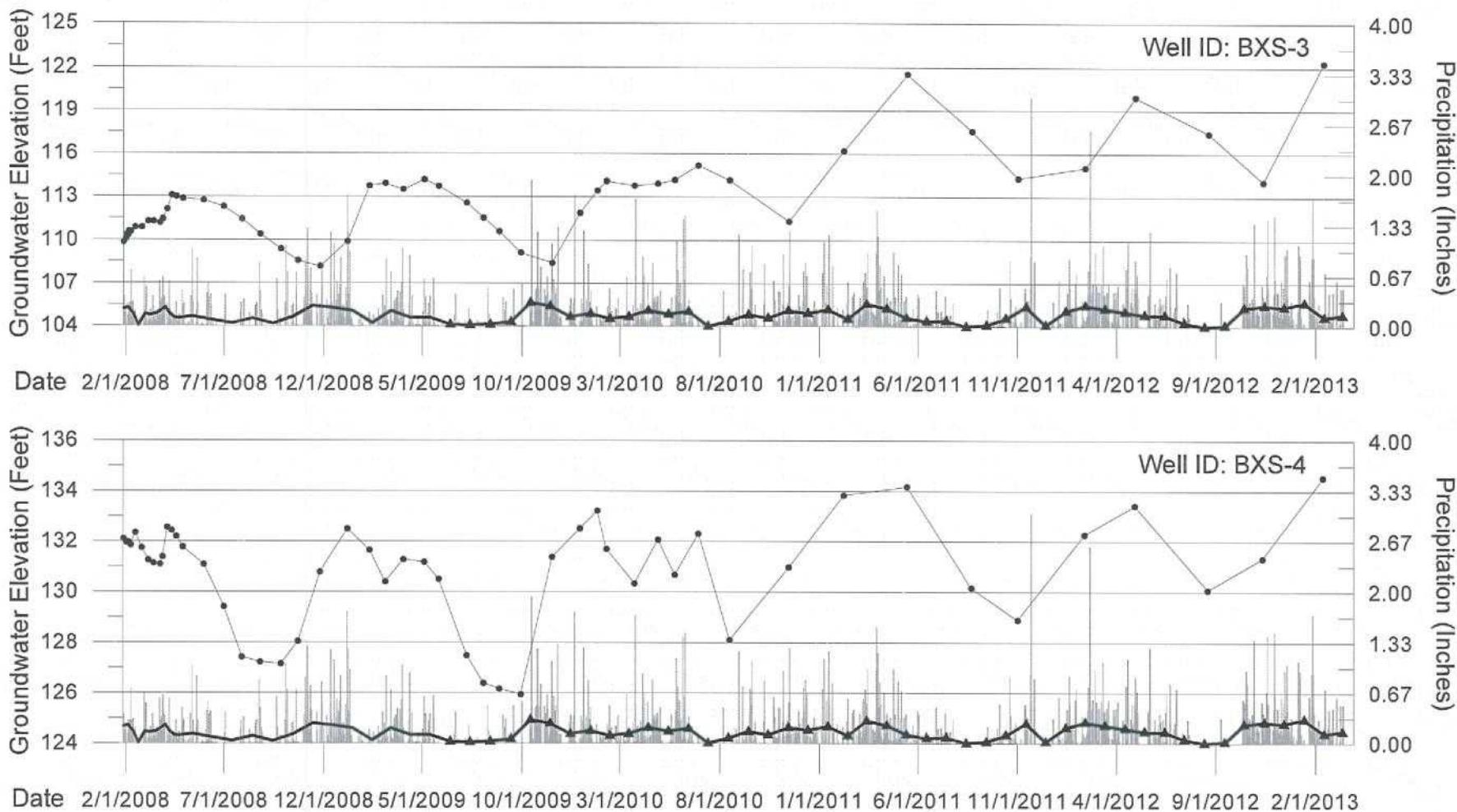
Prepared By: ERO	Project No. 12706
3/11/13	Figure No. 6



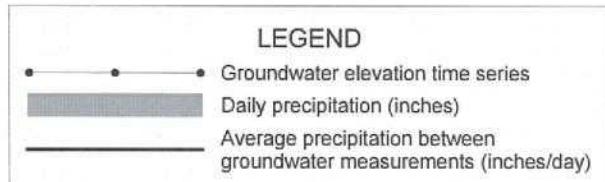
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



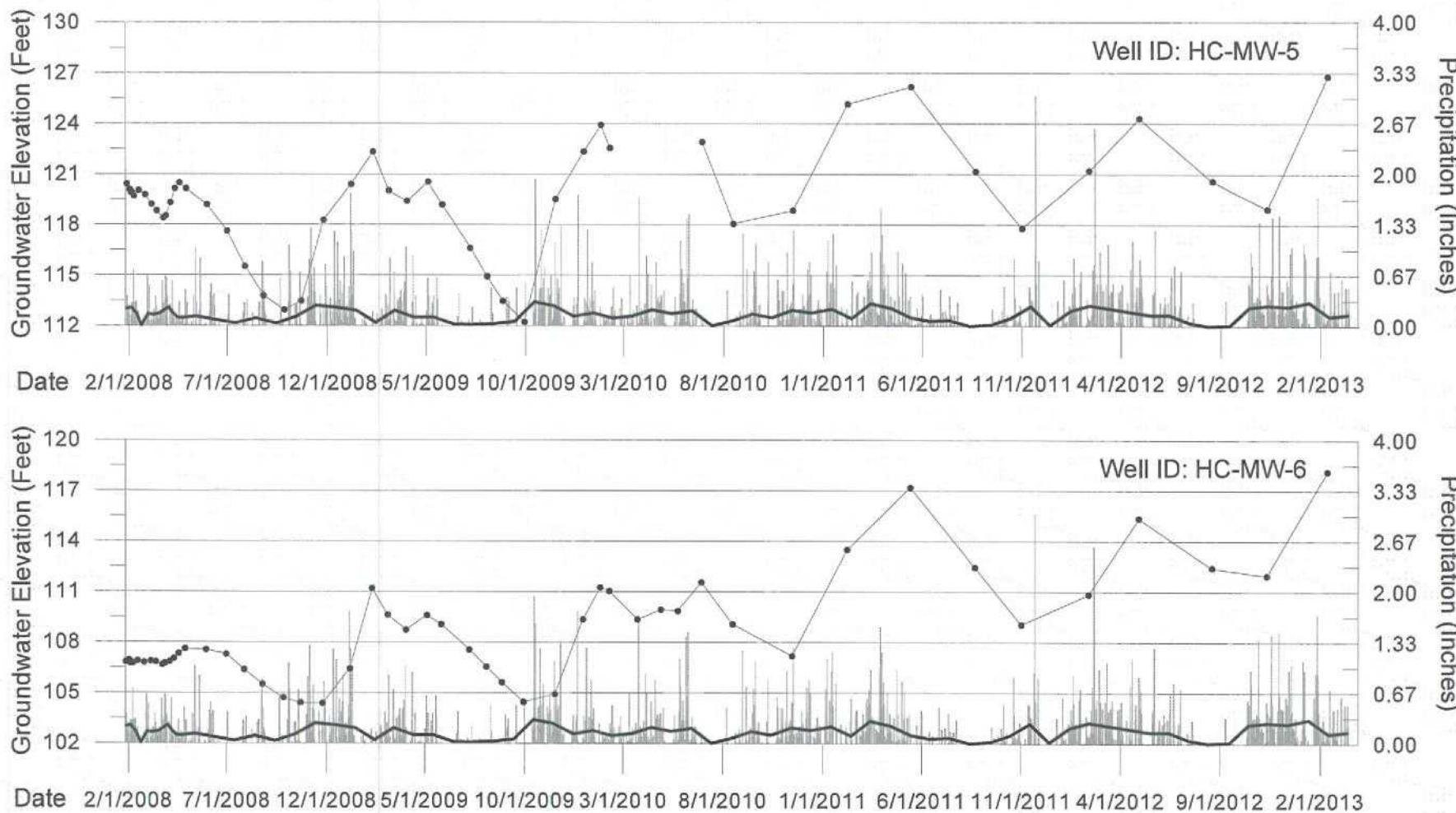
	GROUNDWATER ELEVATION VERSUS TIME: WELLS BXS-1 AND BXS-2 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 7



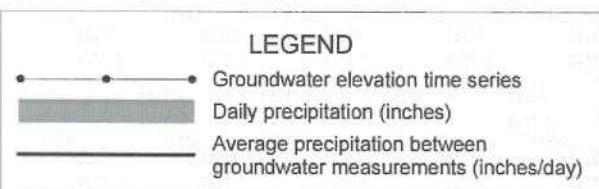
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



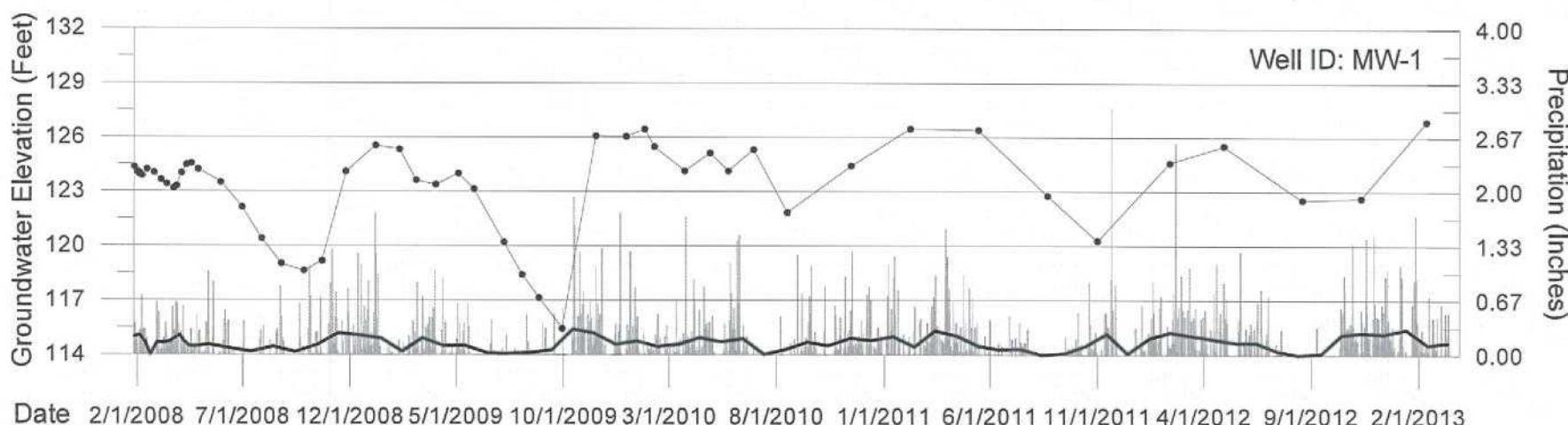
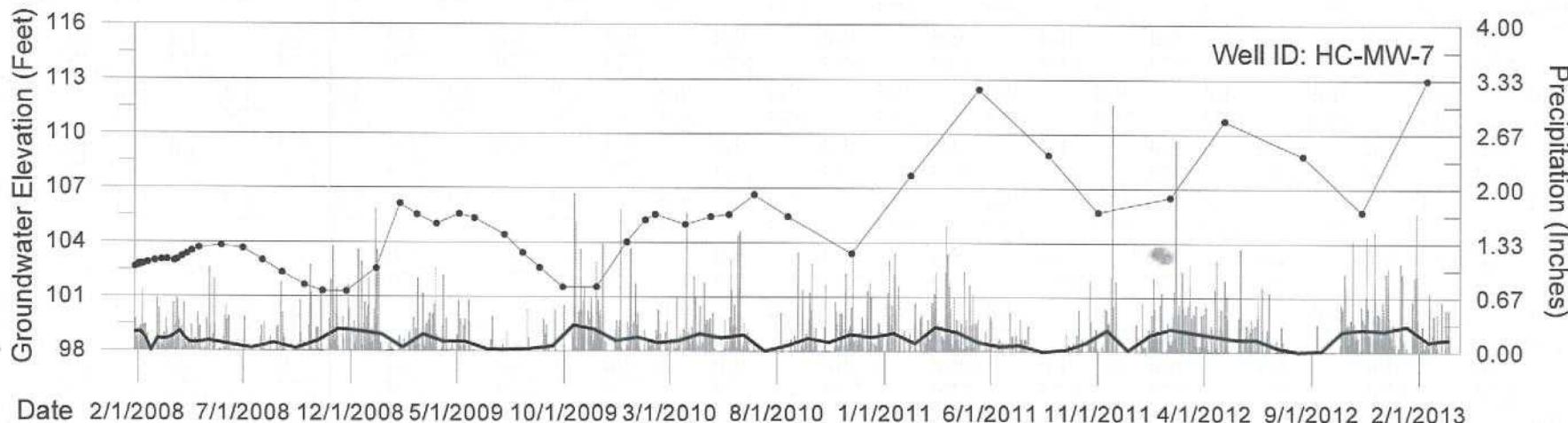
	GROUNDWATER ELEVATION VERSUS TIME: WELLS BXS-3 AND BXS-4 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 8



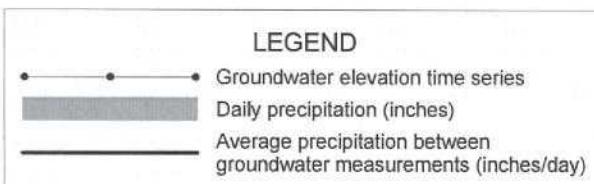
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Groundwater elevation was not collected at HC-MW-5 during the March and April 2010 sampling period due to damaged well monument lid that could not be opened.
 5. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 6. Precipitation is listed as zero for some unavailable March 2013 data points.



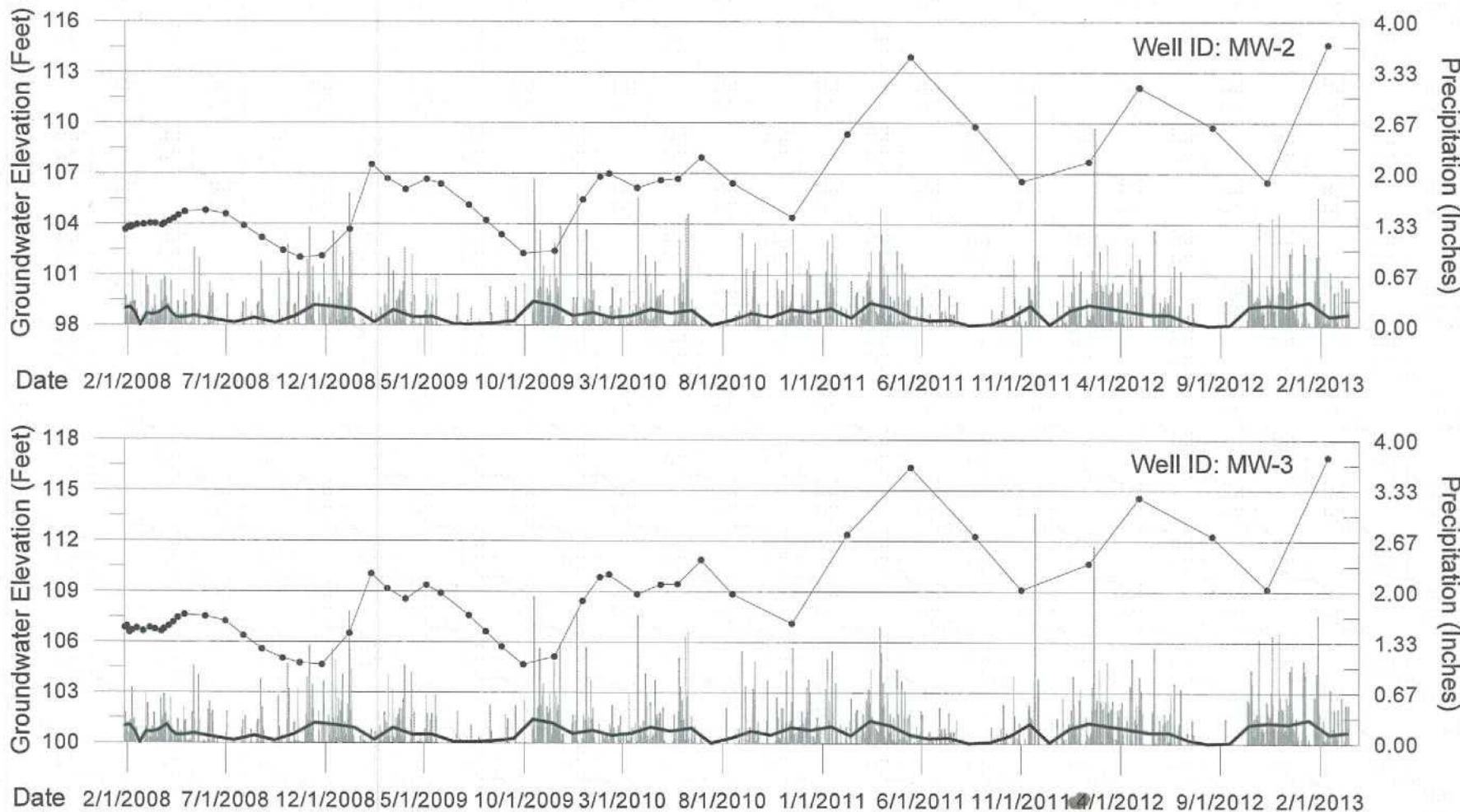
	GROUNDWATER ELEVATION VERSUS TIME: WELLS HC-MW-5 AND HC-MW-6 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 9



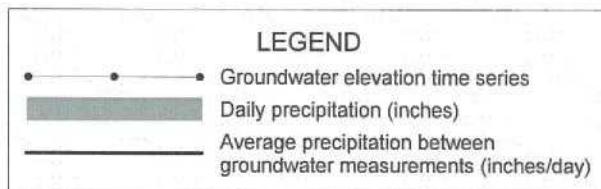
- Notes:
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 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



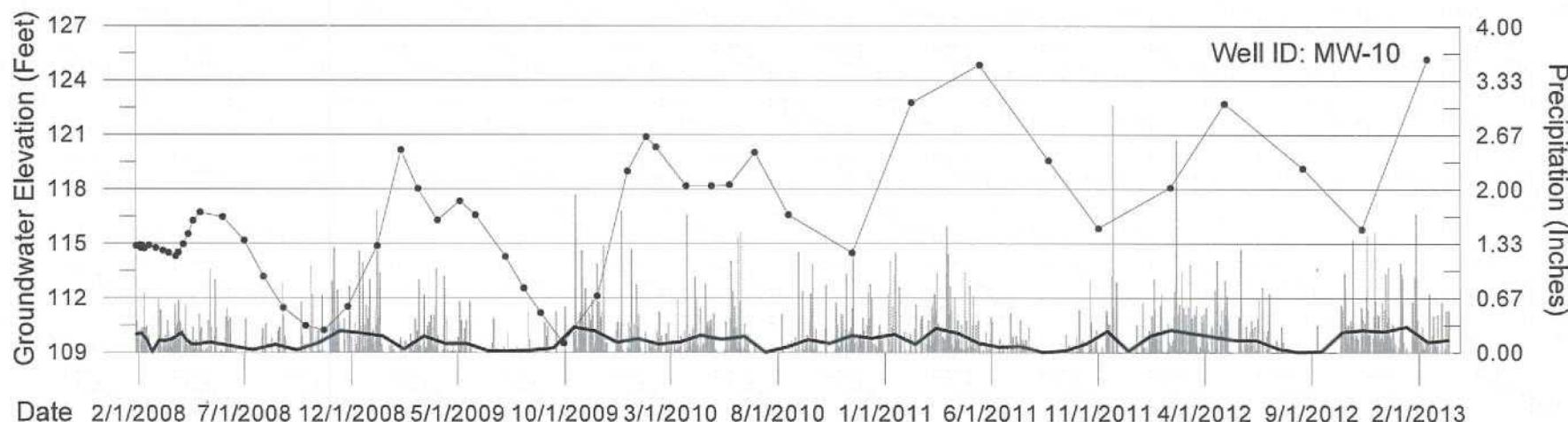
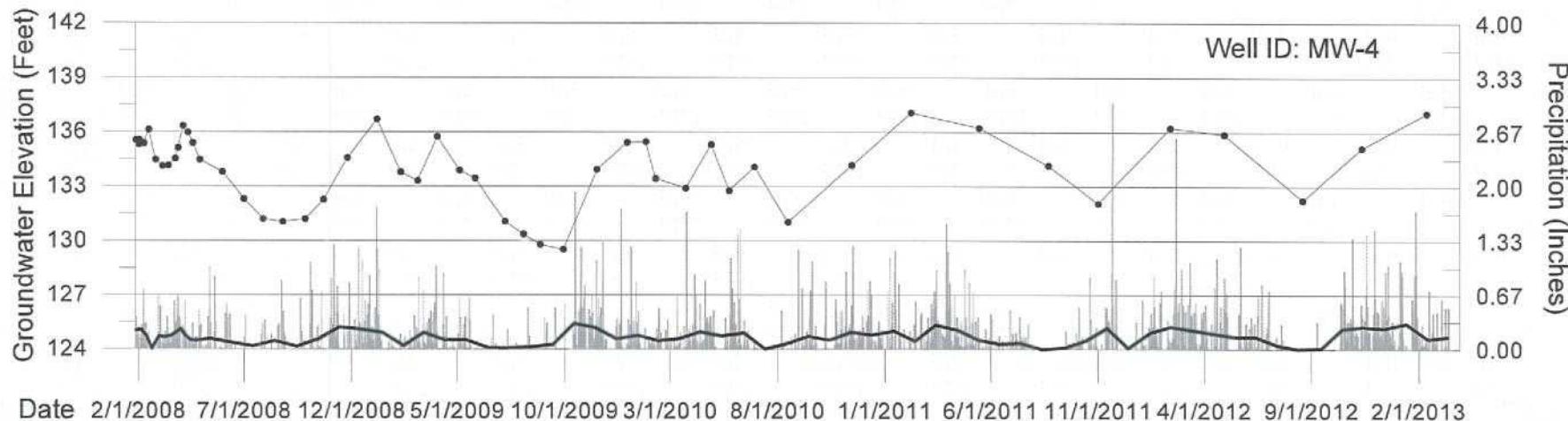
	GROUNDWATER ELEVATION VERSUS TIME: WELLS HC-MW-7 AND MW-1 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 10



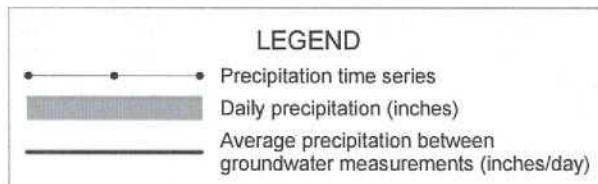
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



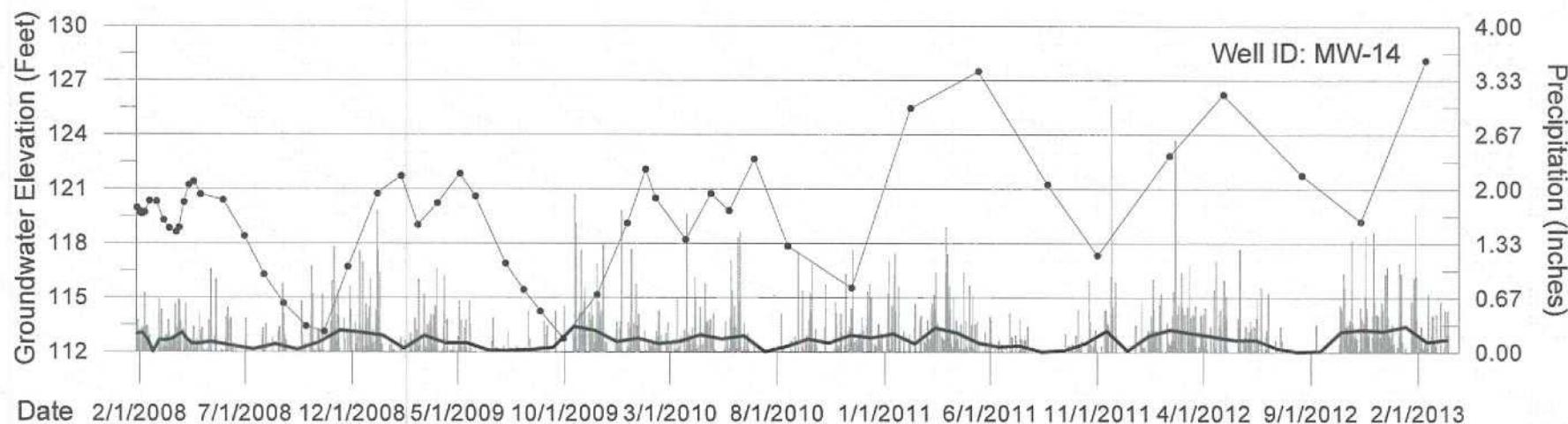
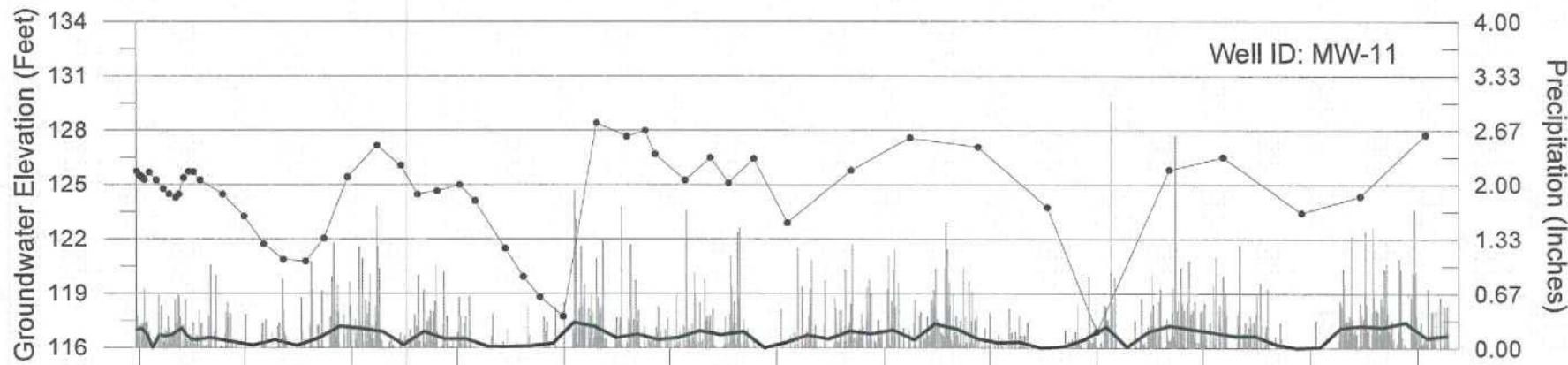
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-2 AND MW-3 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 11



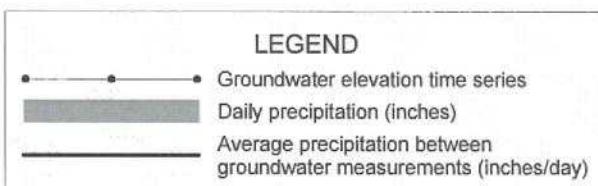
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



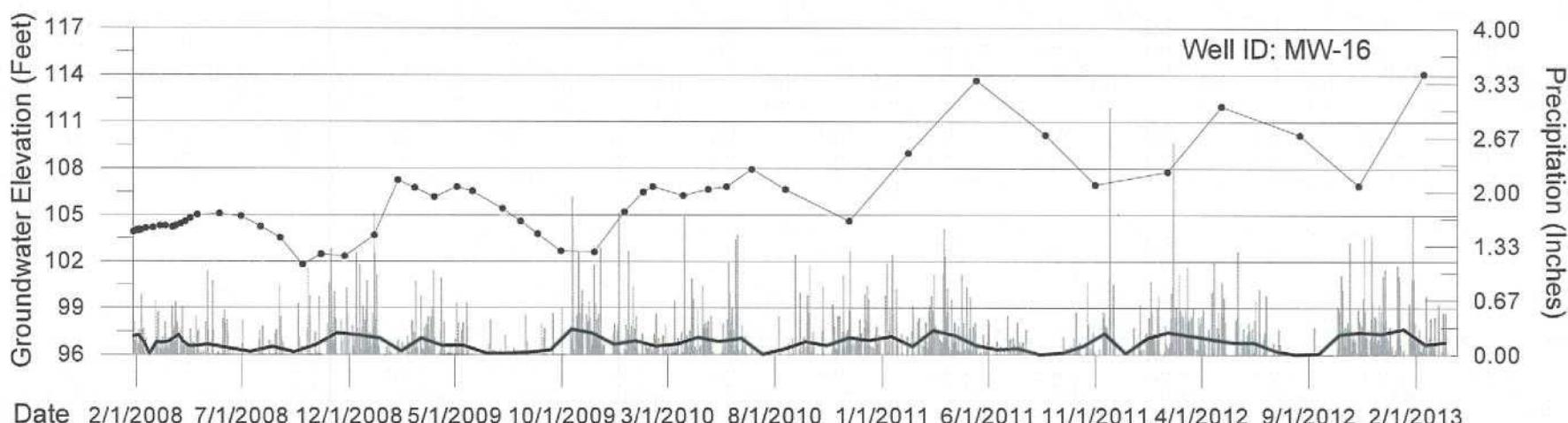
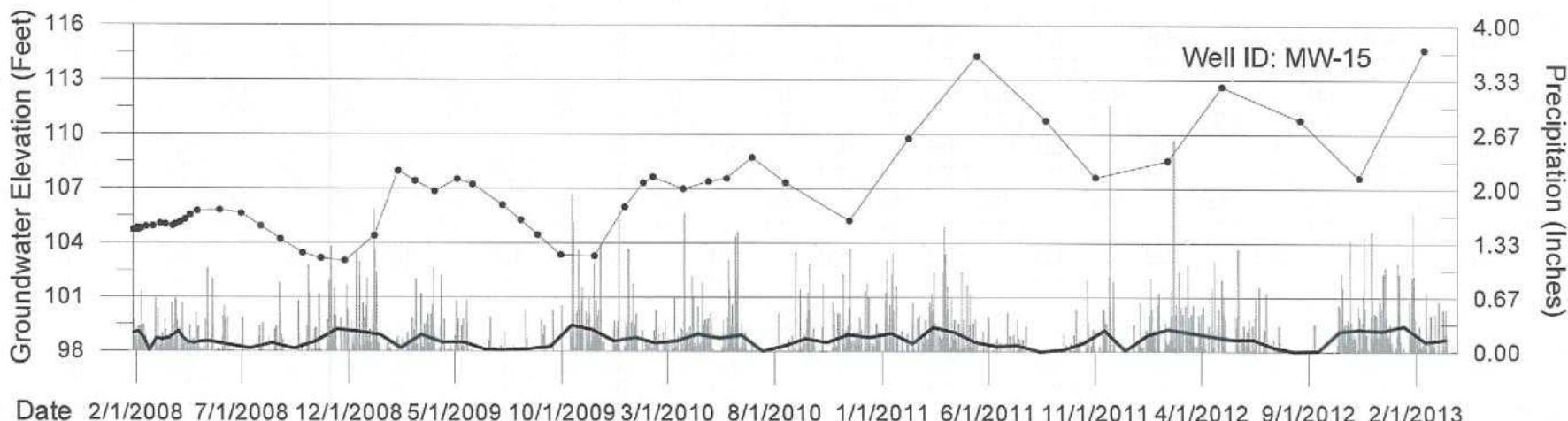
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-4 AND MW-10 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 12



- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



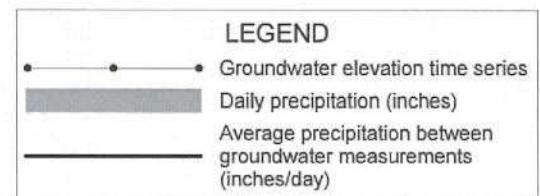
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-11 AND MW-14 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By: ERO 4/3/13	Project No. 12706 Figure No. 13
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Date 2/1/2008 7/1/2008 12/1/2008 5/1/2009 10/1/2009 3/1/2010 8/1/2010 1/1/2011 6/1/2011 11/1/2011 4/1/2012 9/1/2012 2/1/2013

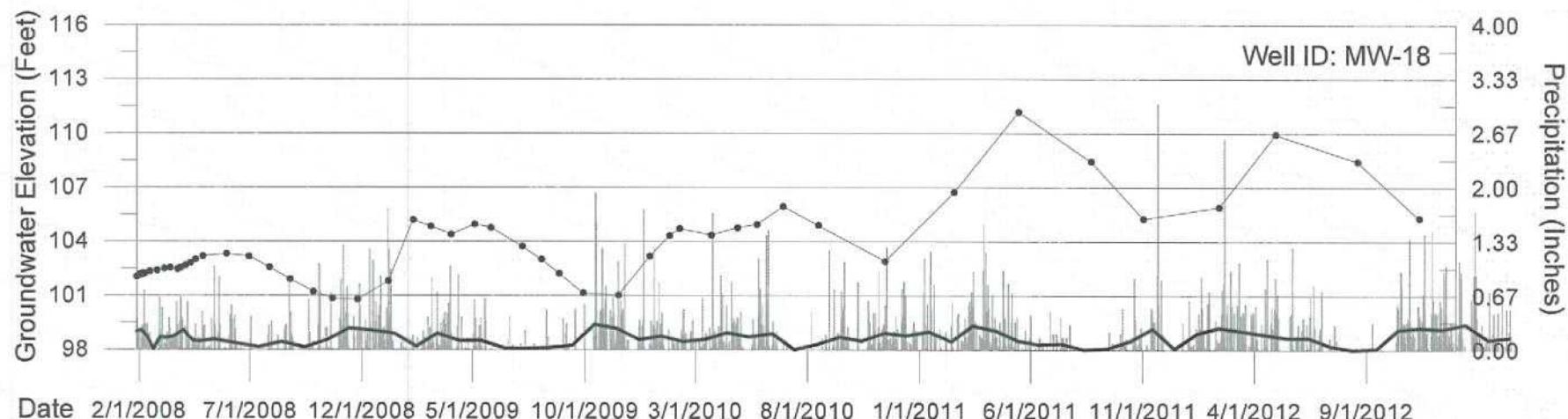
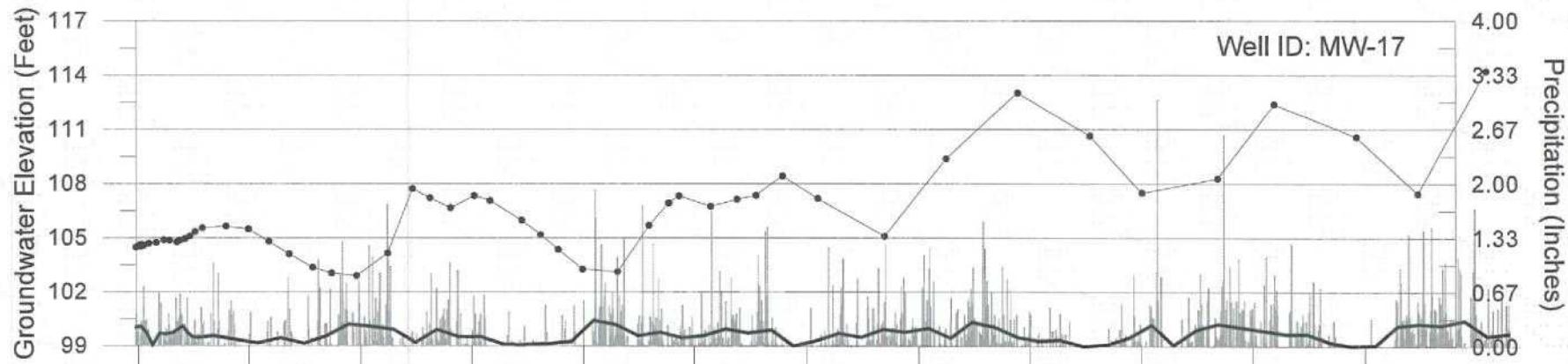
Notes:

1. Vertical datum is N.A.V.D 88.
2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
3. Precipitation data include rain and/or melted snow.
4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
5. Precipitation is listed as zero for some unavailable March 2013 data points.
6. In May 2011, a suspected incorrect depth to water measurement occurred at MW-15. The 2nd Quarter 2011 groundwater elevation at MW-15 was estimated by calculating the average elevation difference between MW-15 and MW-40 for the 3rd Quarter 2010 through the 1st Quarter 2011 and adding this difference to the 2nd Quarter 2011 groundwater elevation measured at MW-40.

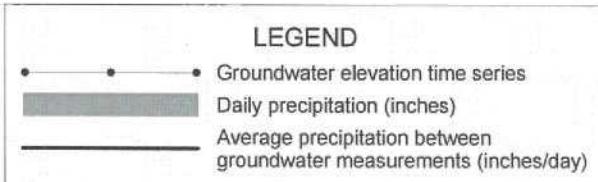


GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-15 AND MW-16
Former J.H. Baxter and Co. Wood Treating Facility
Arlington, Washington

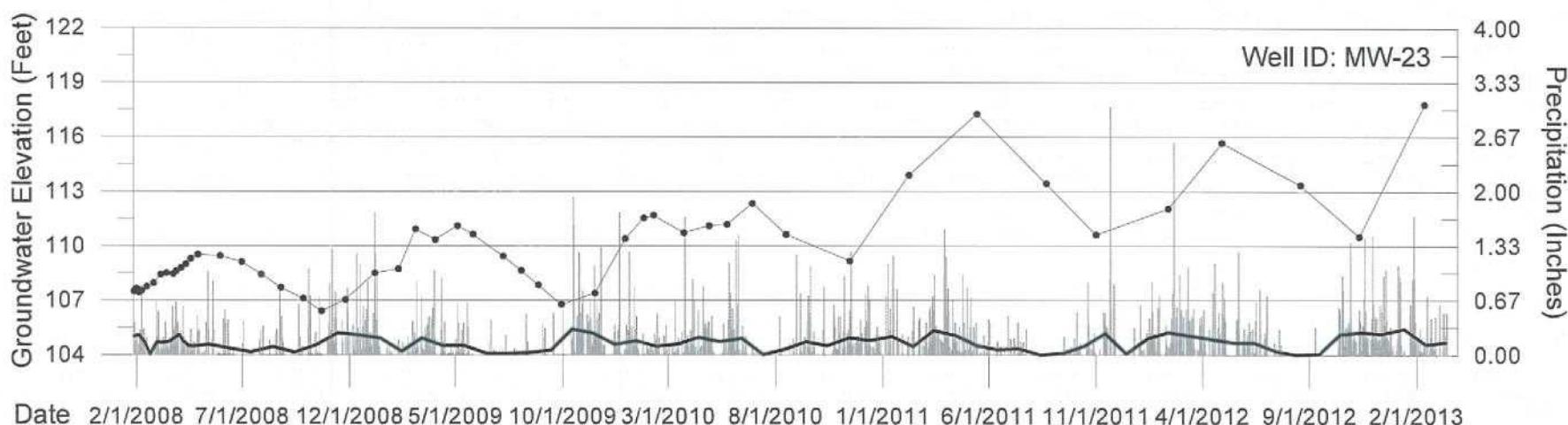
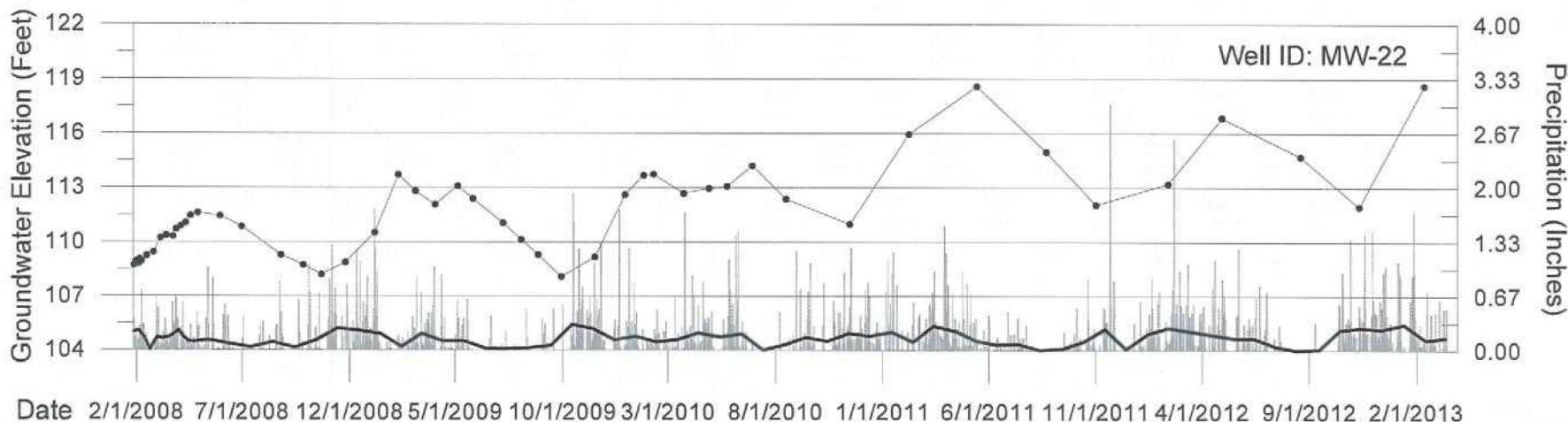
Prepared By: ERO	Project No. 12706
4/3/13	Figure No. 14



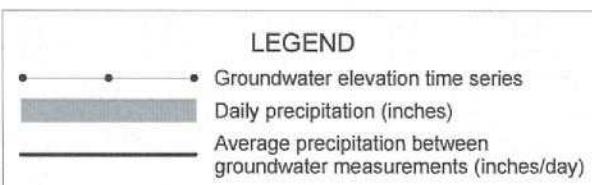
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



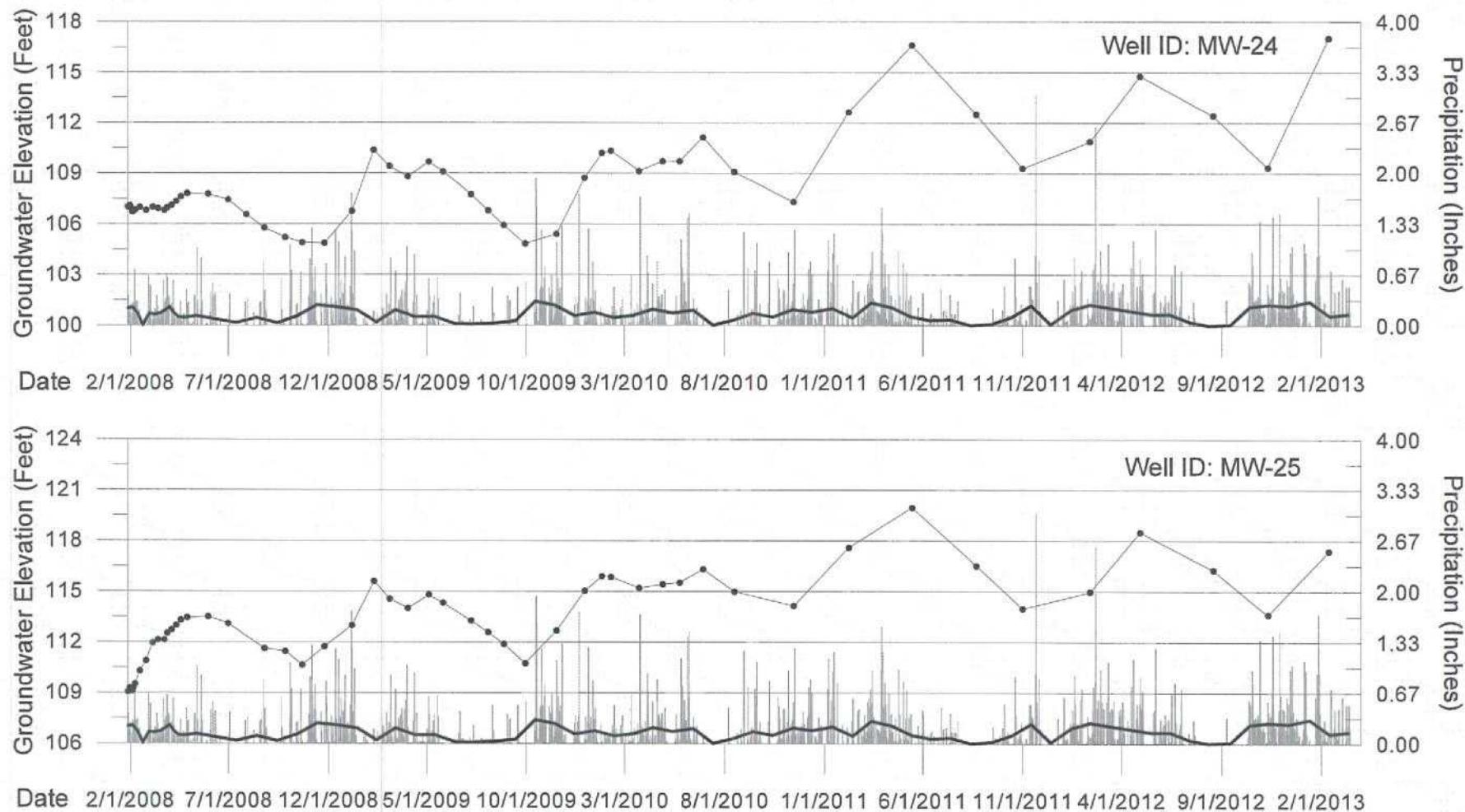
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-17 AND MW-18 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 15



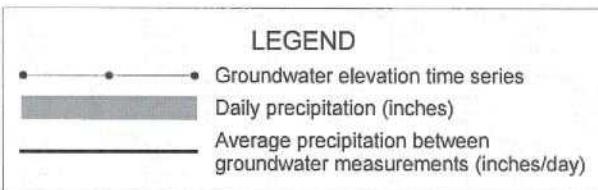
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



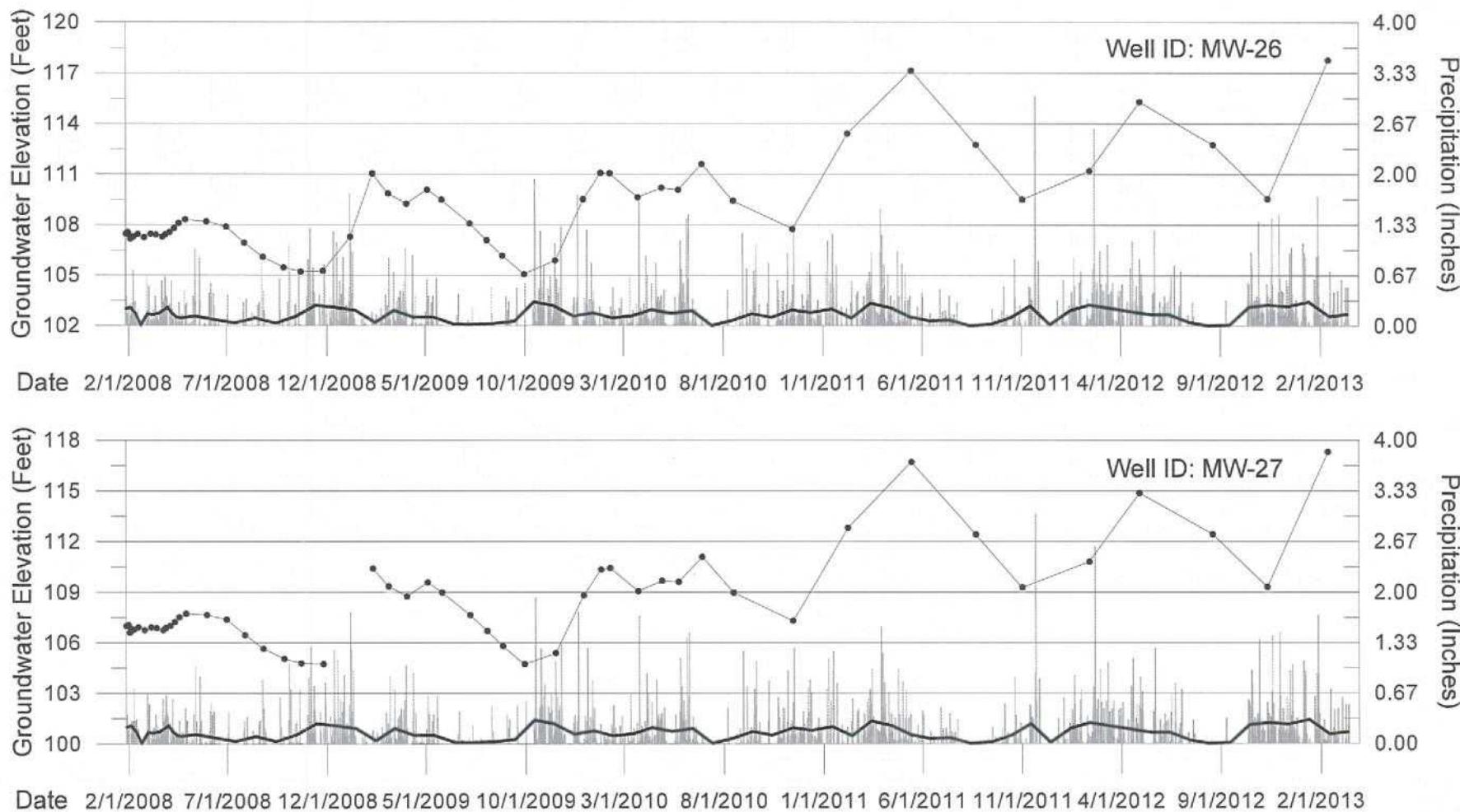
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-22 AND MW-23 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 16



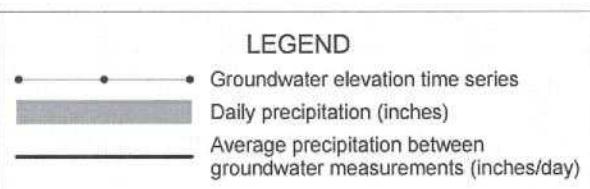
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



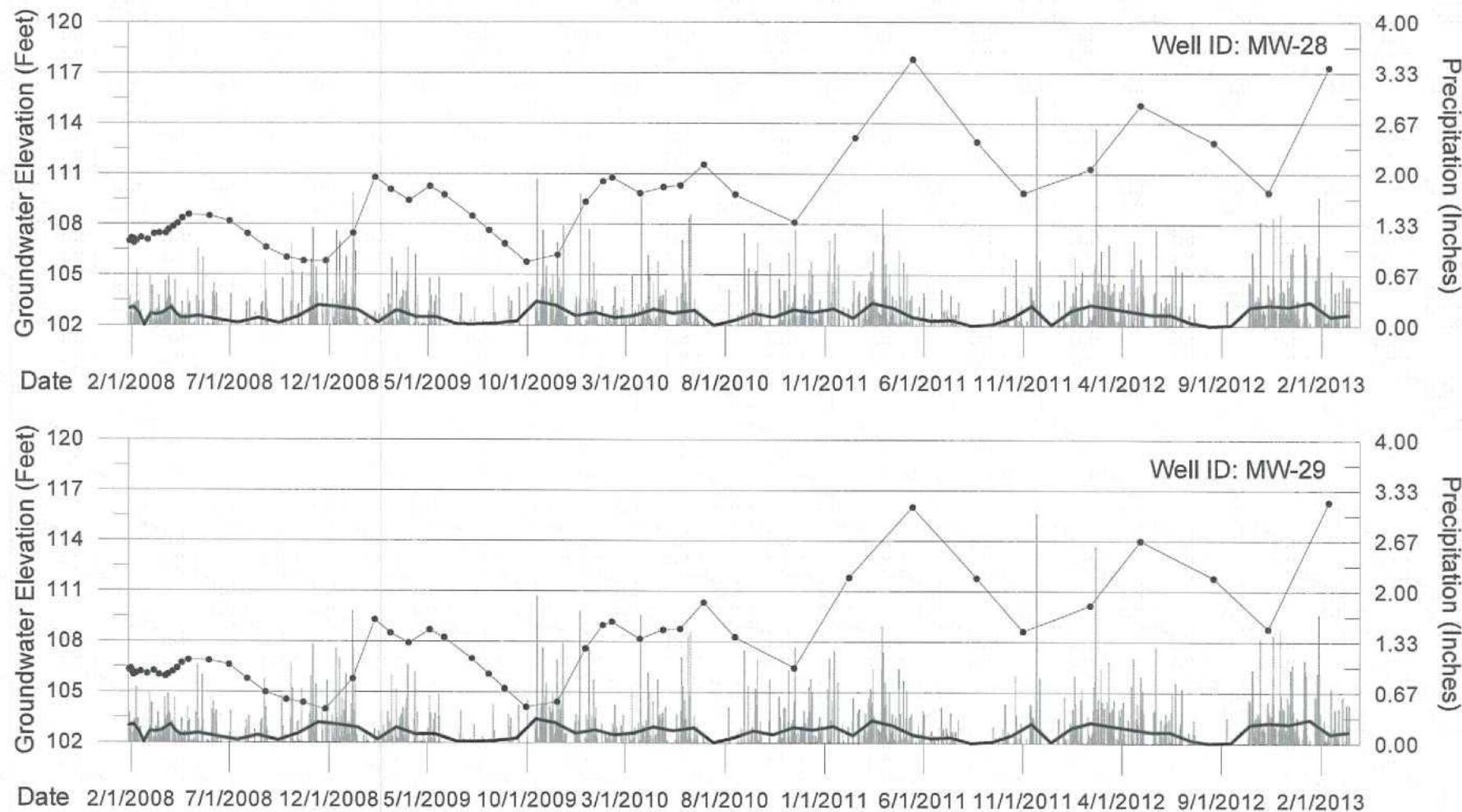
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-24 AND MW-25 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 17



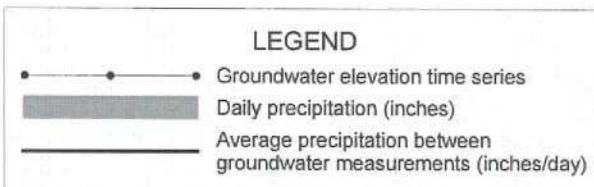
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Groundwater elevation was not collected at MW-27 during the December 2008 sampling period due to high surface water conditions surrounding the well.
 5. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 6. Precipitation is listed as zero for some unavailable March 2013 data points.



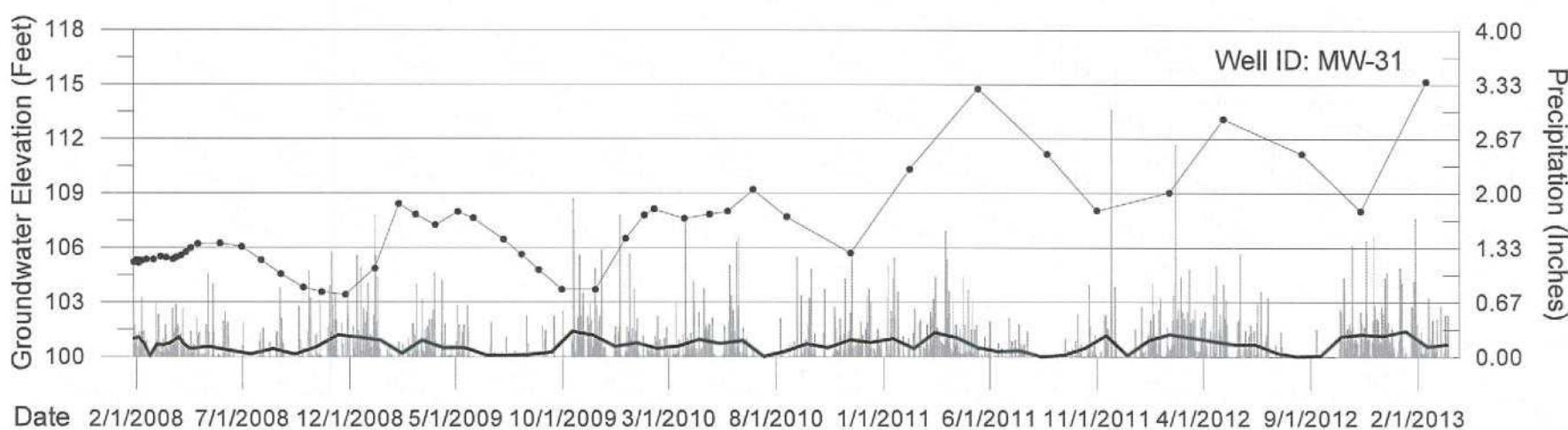
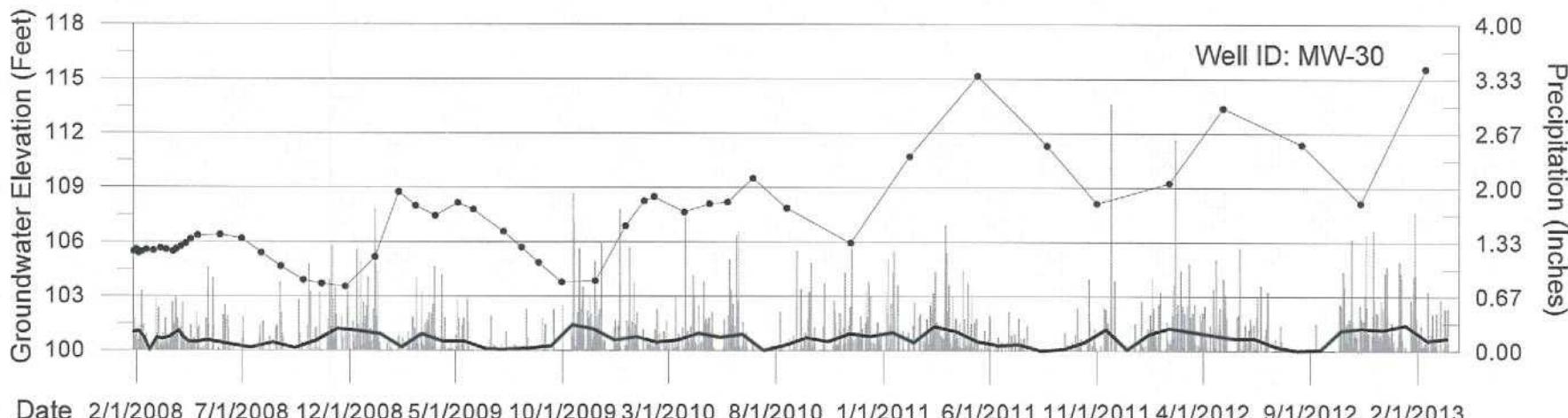
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-26 AND MW-27 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 18



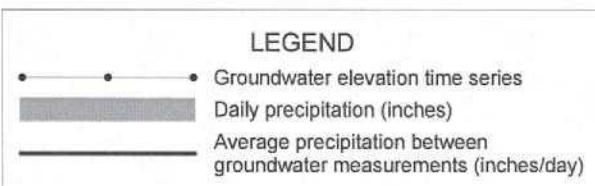
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



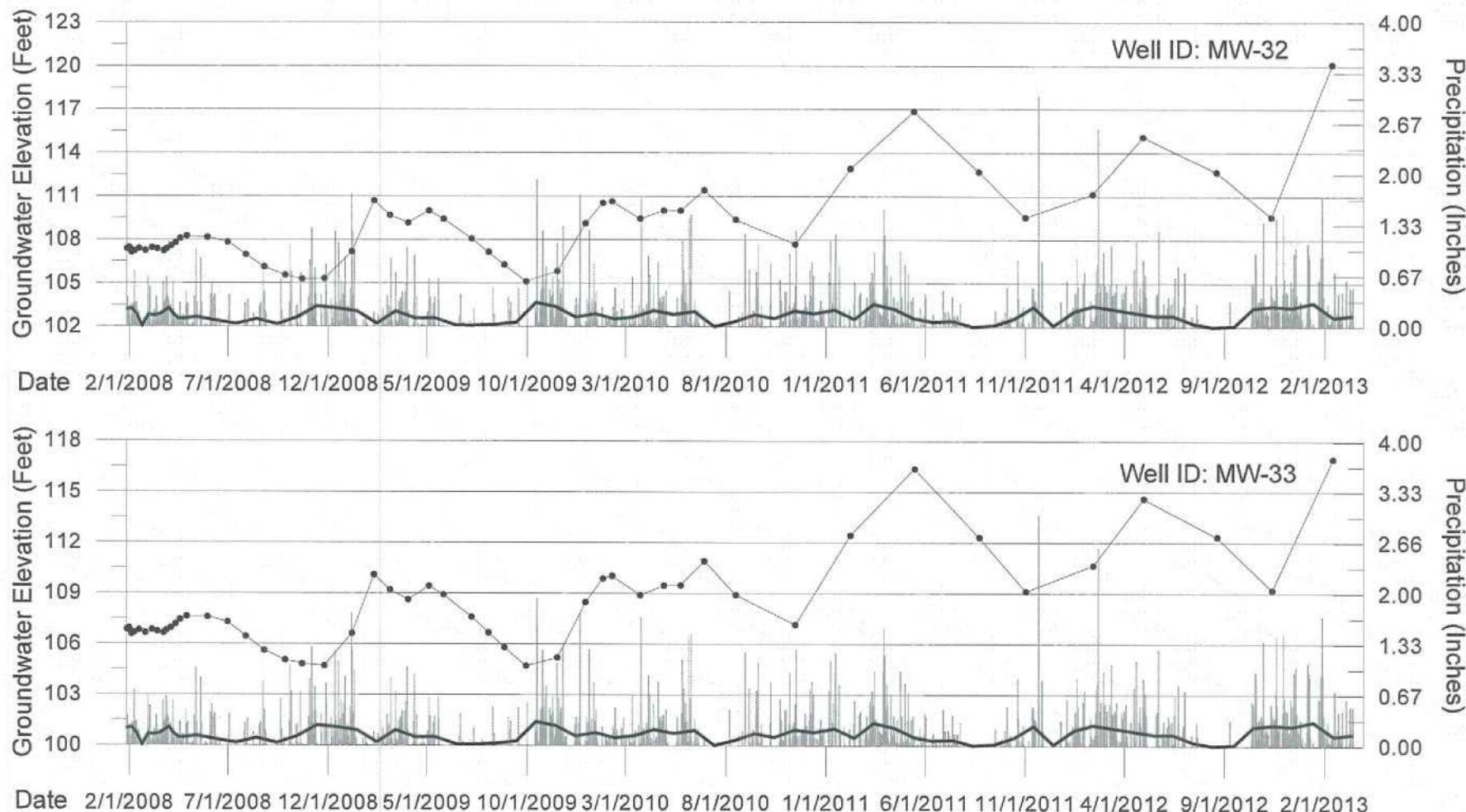
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-28 AND MW-29 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 19



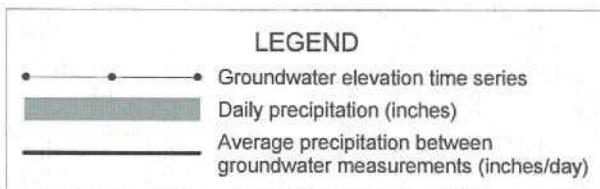
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



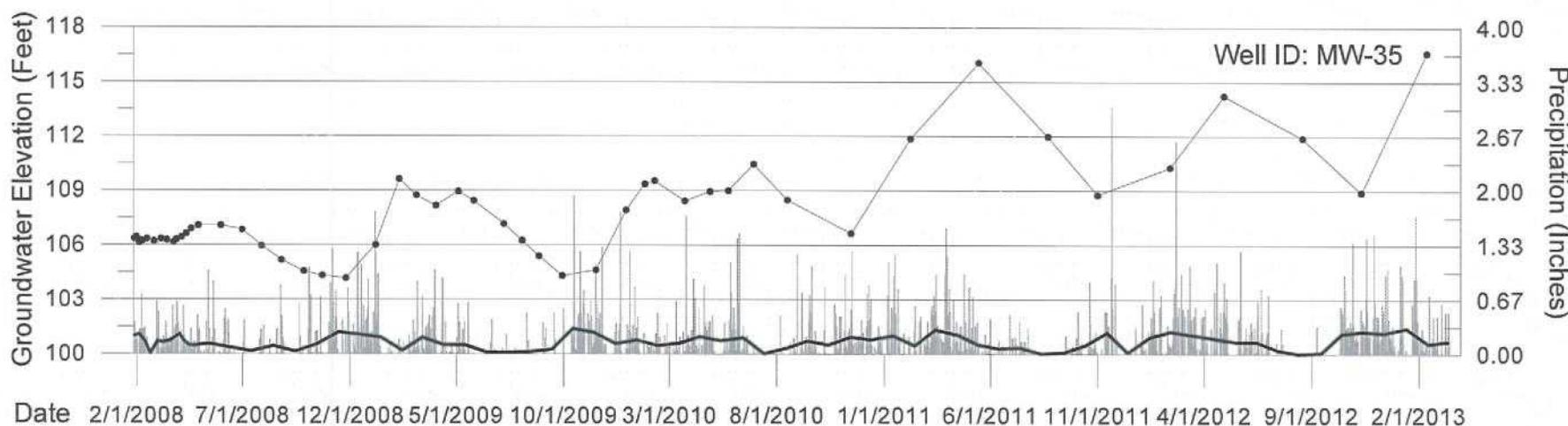
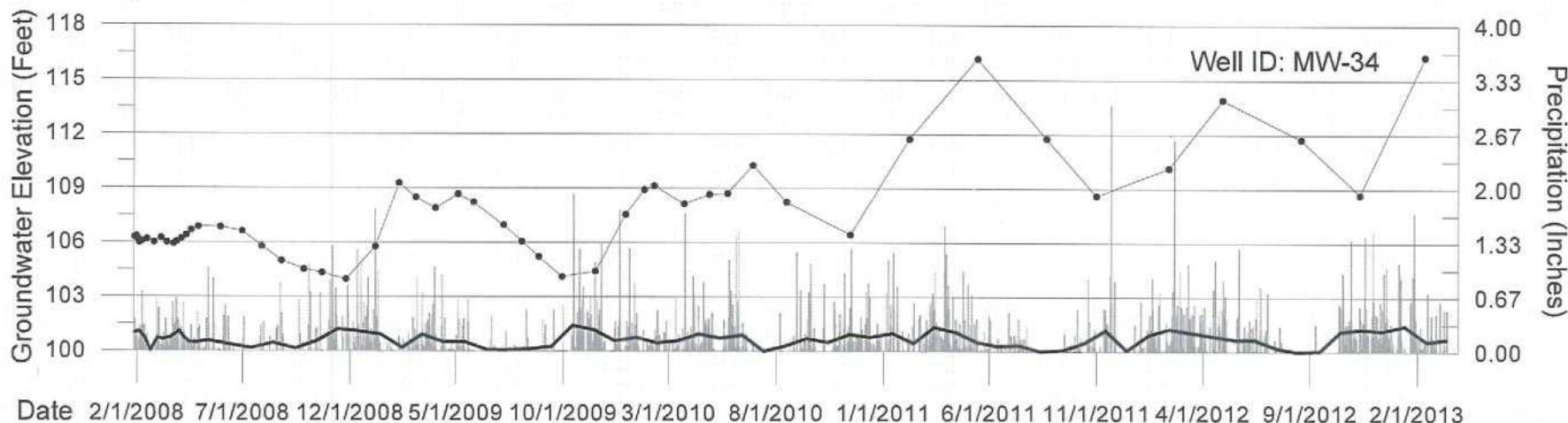
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-30 AND MW-31 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 20



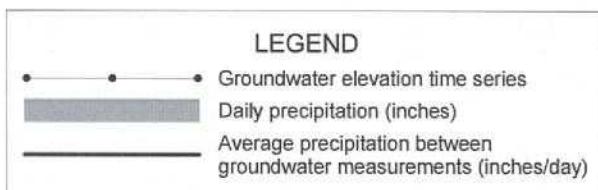
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



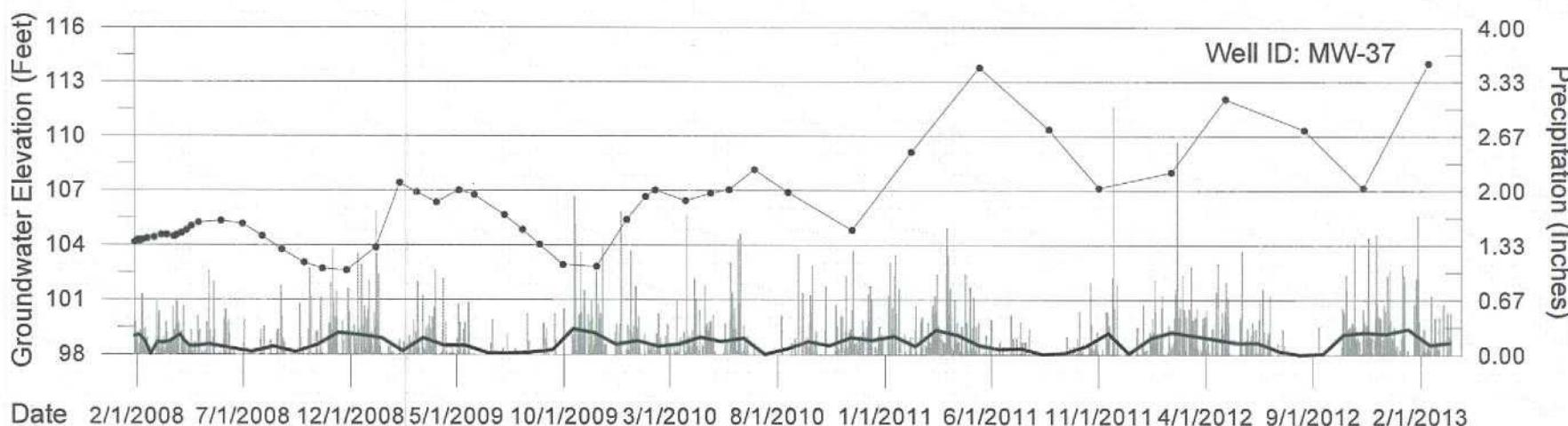
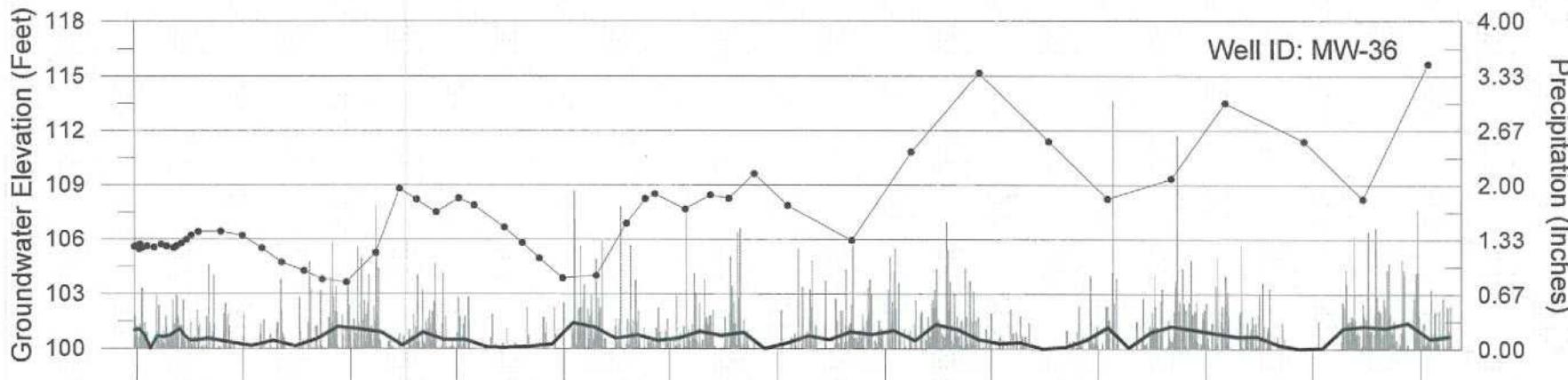
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-32 AND MW-33 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 21



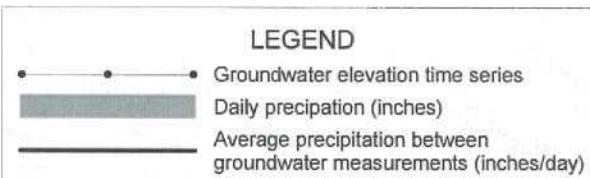
- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.



	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-34 AND MW-35 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 22

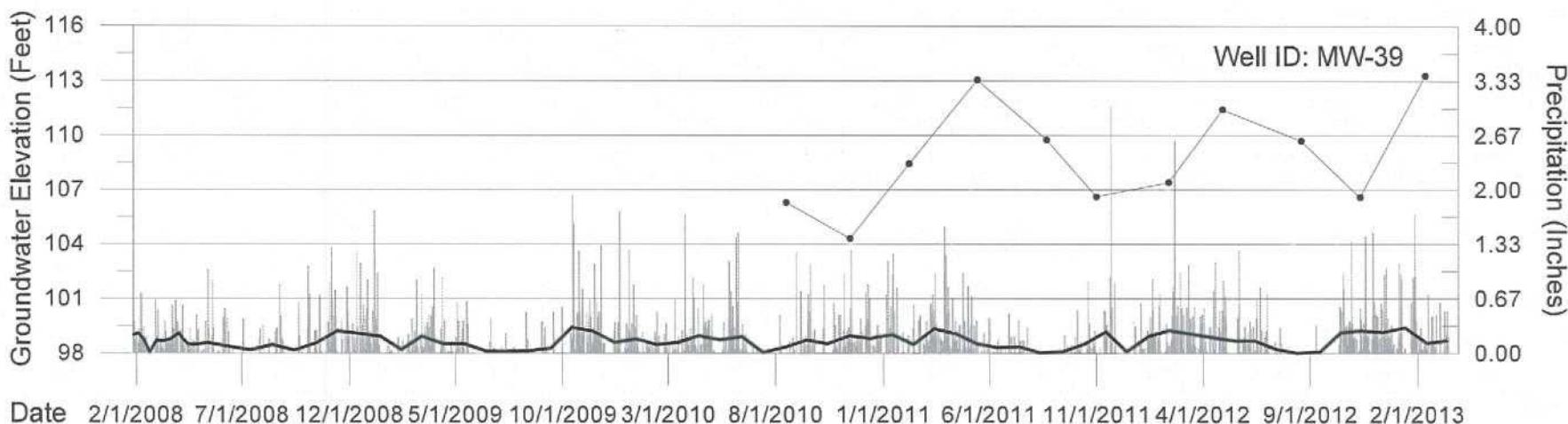
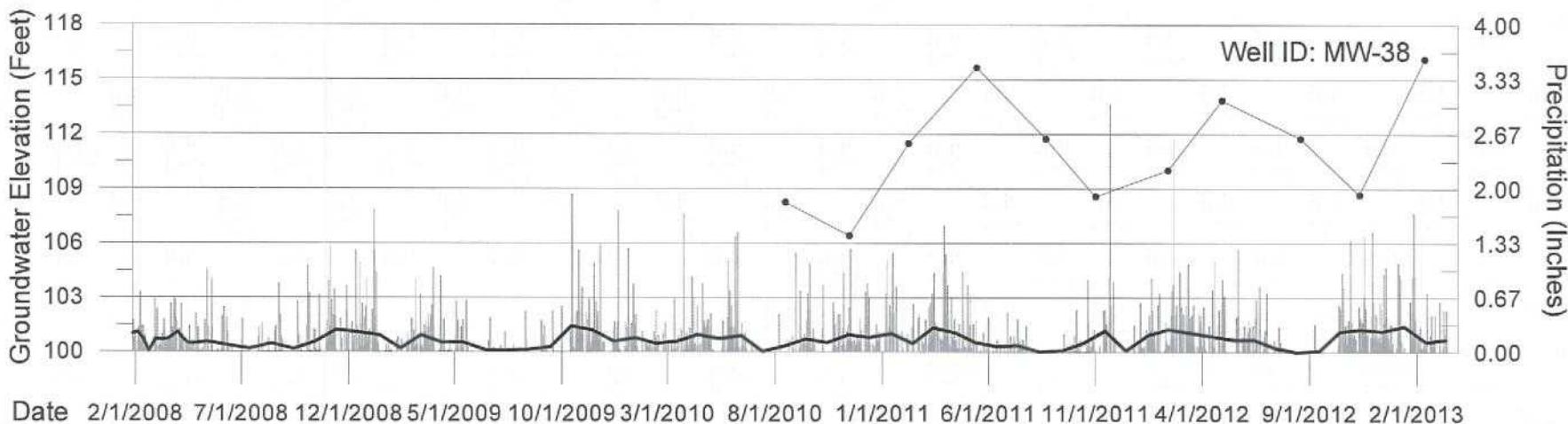


- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.

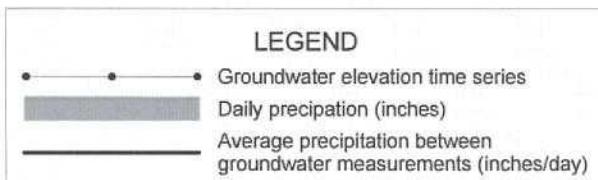


GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-36 AND MW-37
Former J.H. Baxter and Co. Wood Treating Facility
Arlington, Washington

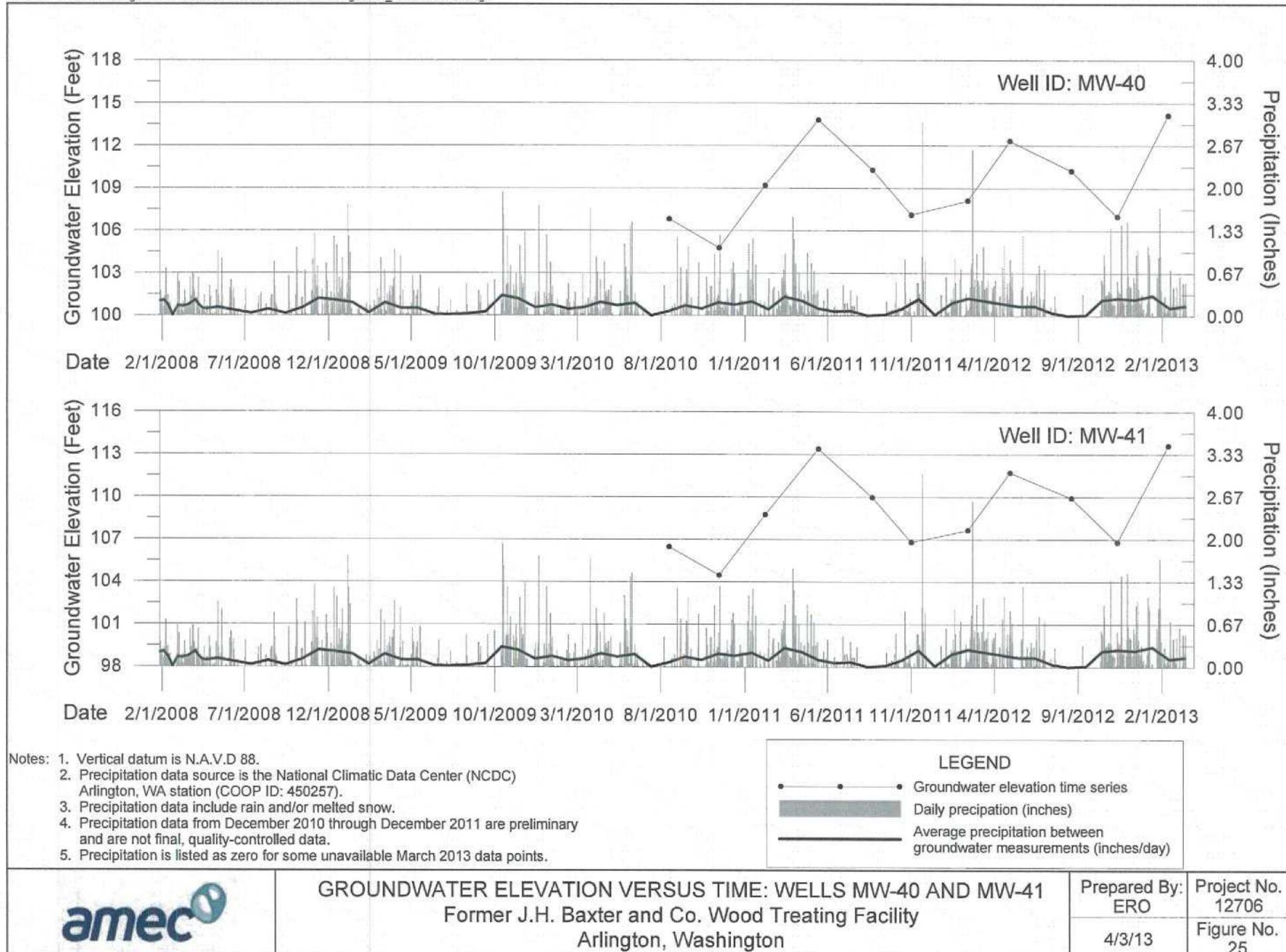
Prepared By: ERO	Project No. 12706
4/3/13	Figure No. 23

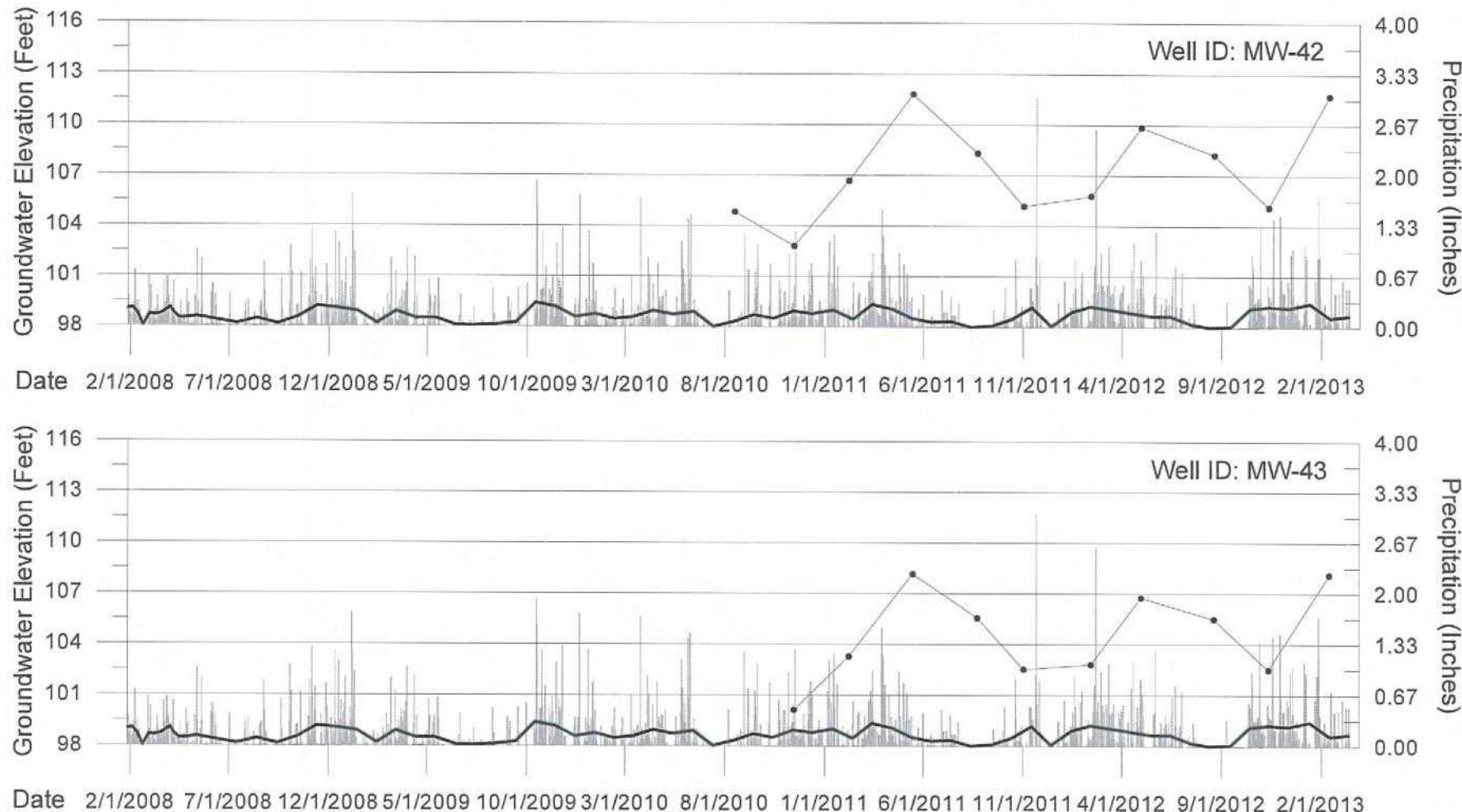


- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.

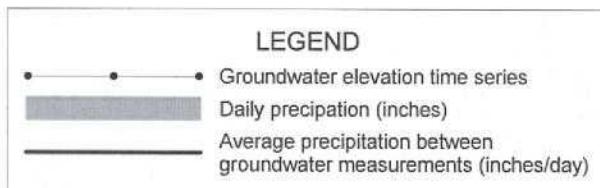


	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-38 AND MW-39 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 24





- Notes:
1. Vertical datum is N.A.V.D 88.
 2. Precipitation data source is the National Climatic Data Center (NCDC) Arlington, WA station (COOP ID: 450257).
 3. Precipitation data include rain and/or melted snow.
 4. Precipitation data from December 2010 through December 2011 are preliminary and are not final, quality-controlled data.
 5. Precipitation is listed as zero for some unavailable March 2013 data points.

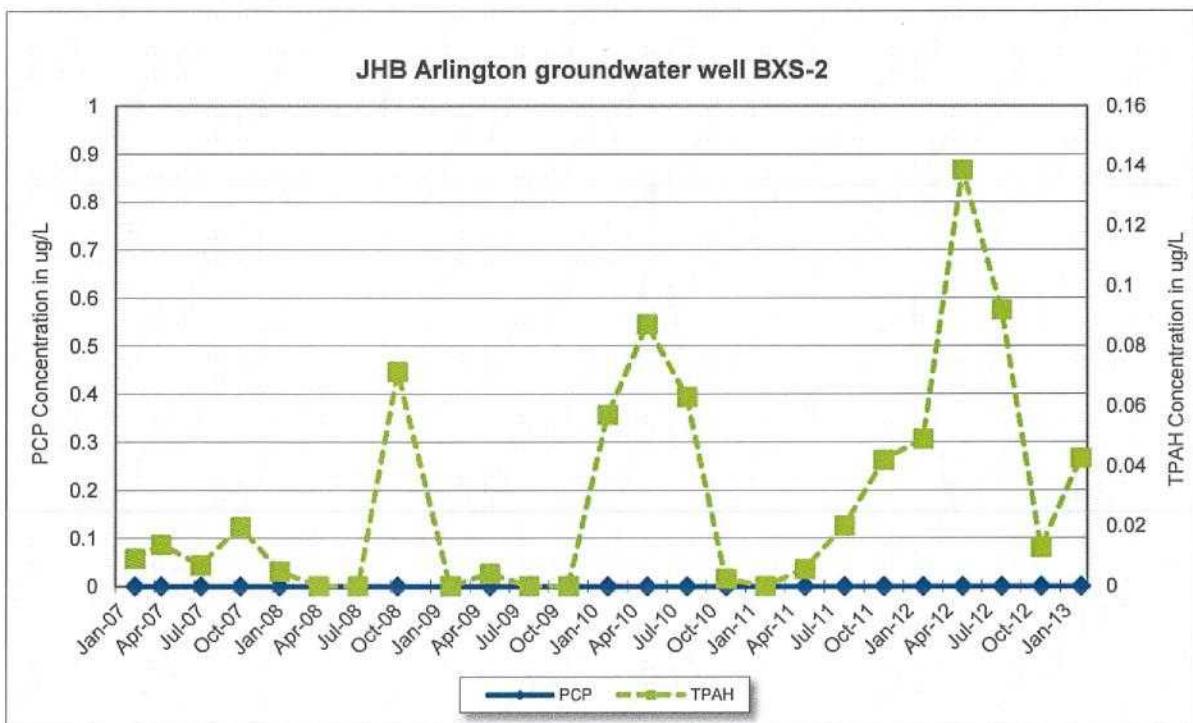
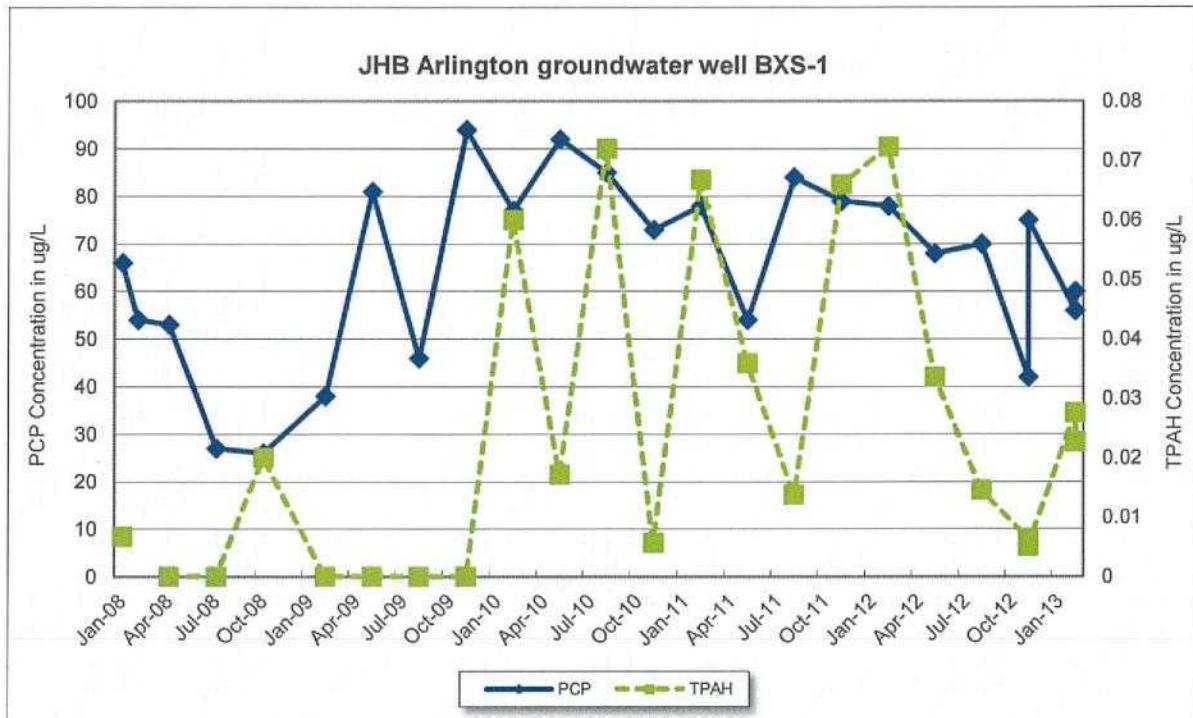


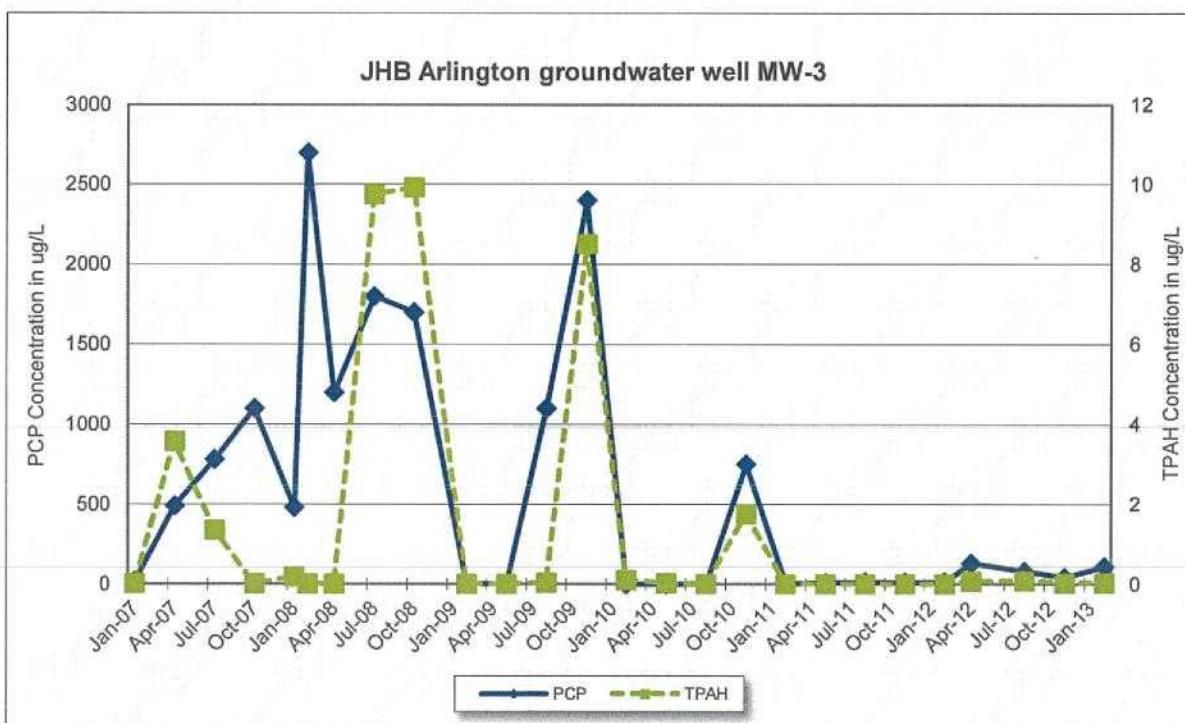
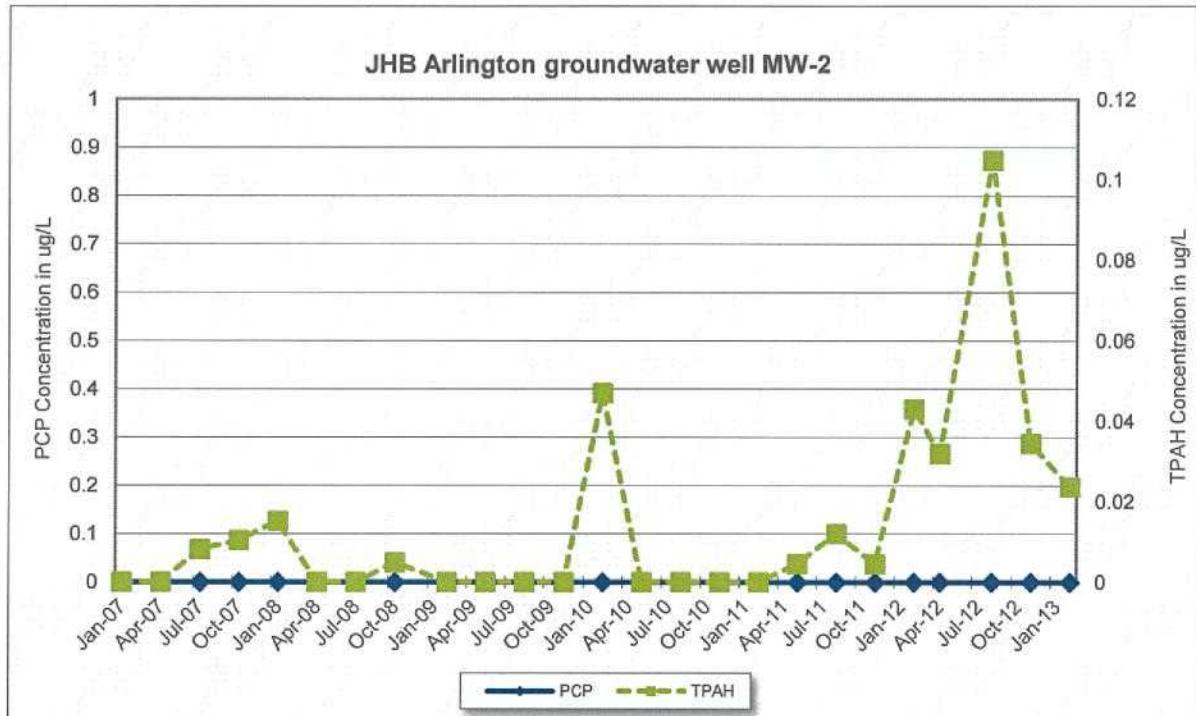
	GROUNDWATER ELEVATION VERSUS TIME: WELLS MW-42 AND MW-43 Former J.H. Baxter and Co. Wood Treating Facility Arlington, Washington	Prepared By:	Project No.
		ERO	12706
		4/3/13	Figure No. 26

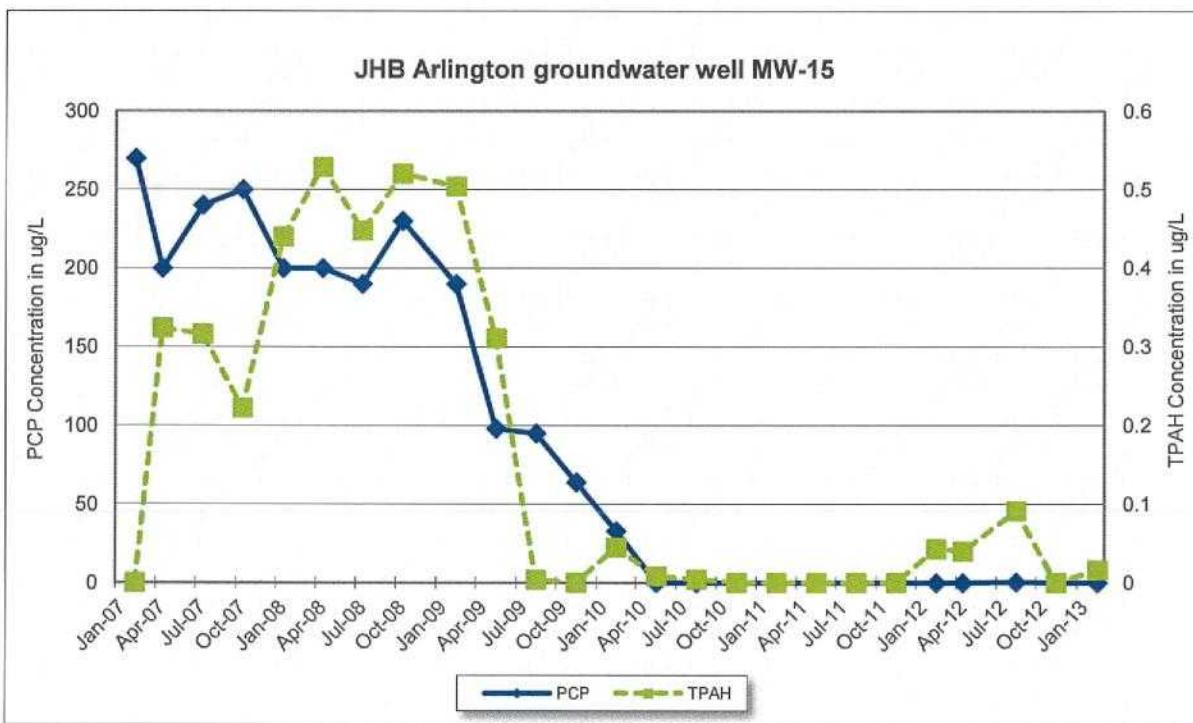
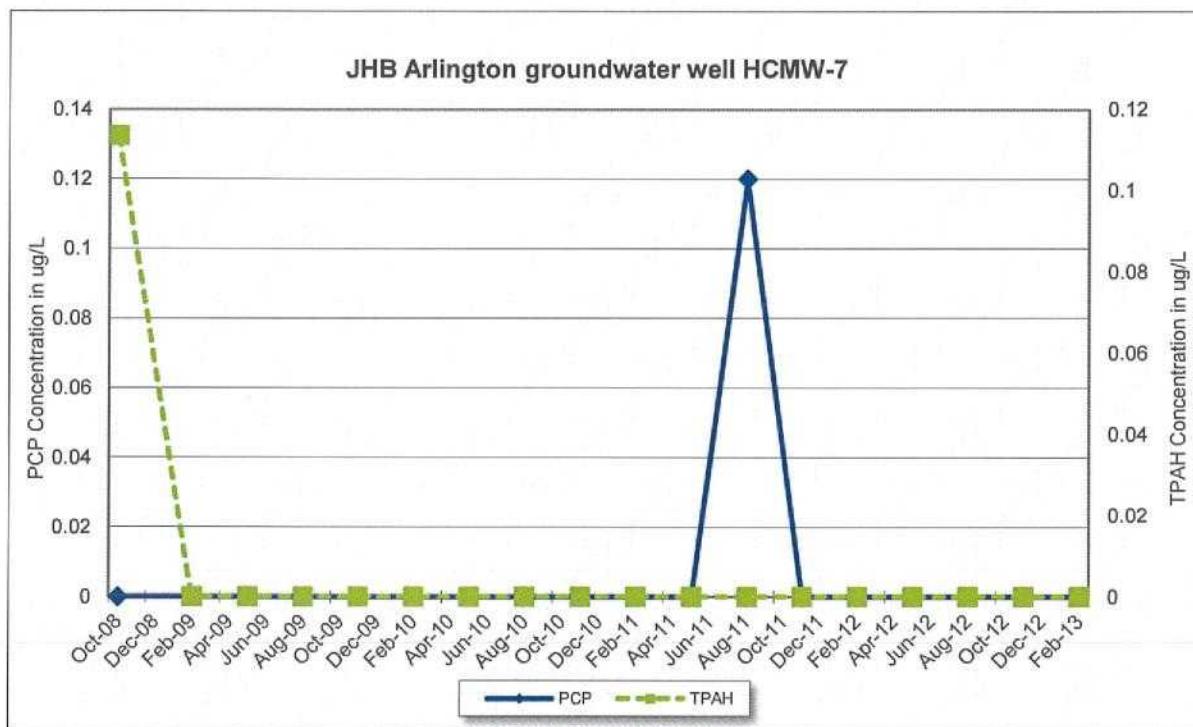


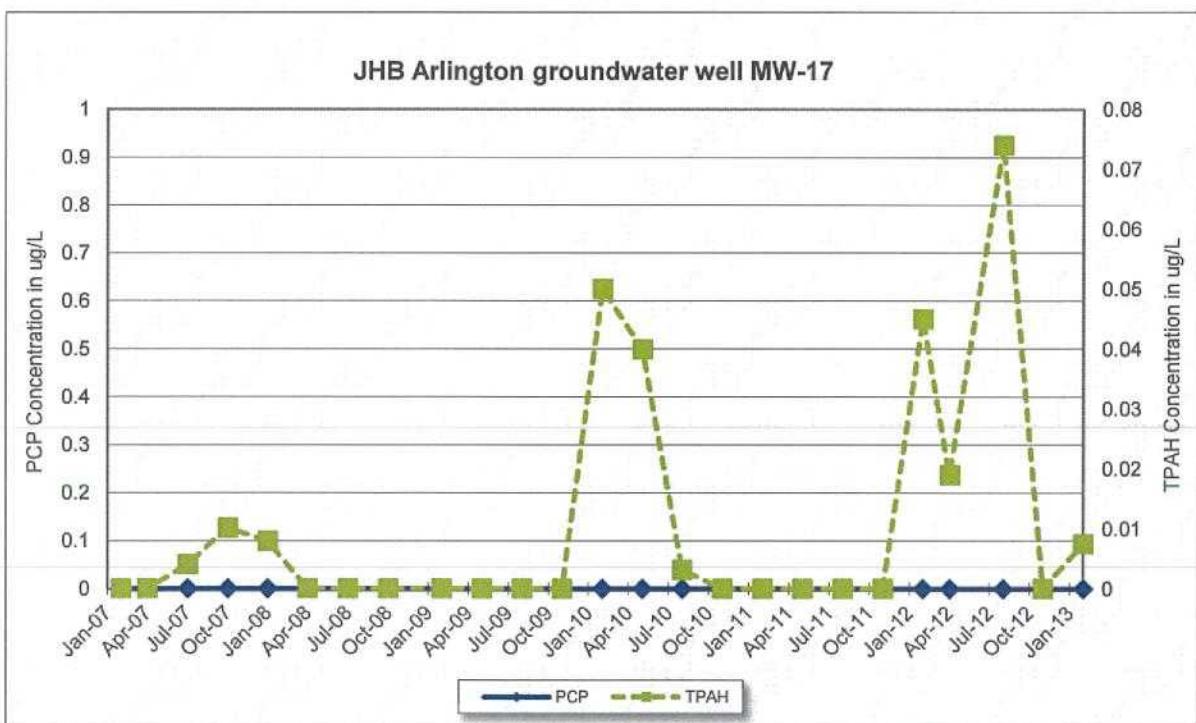
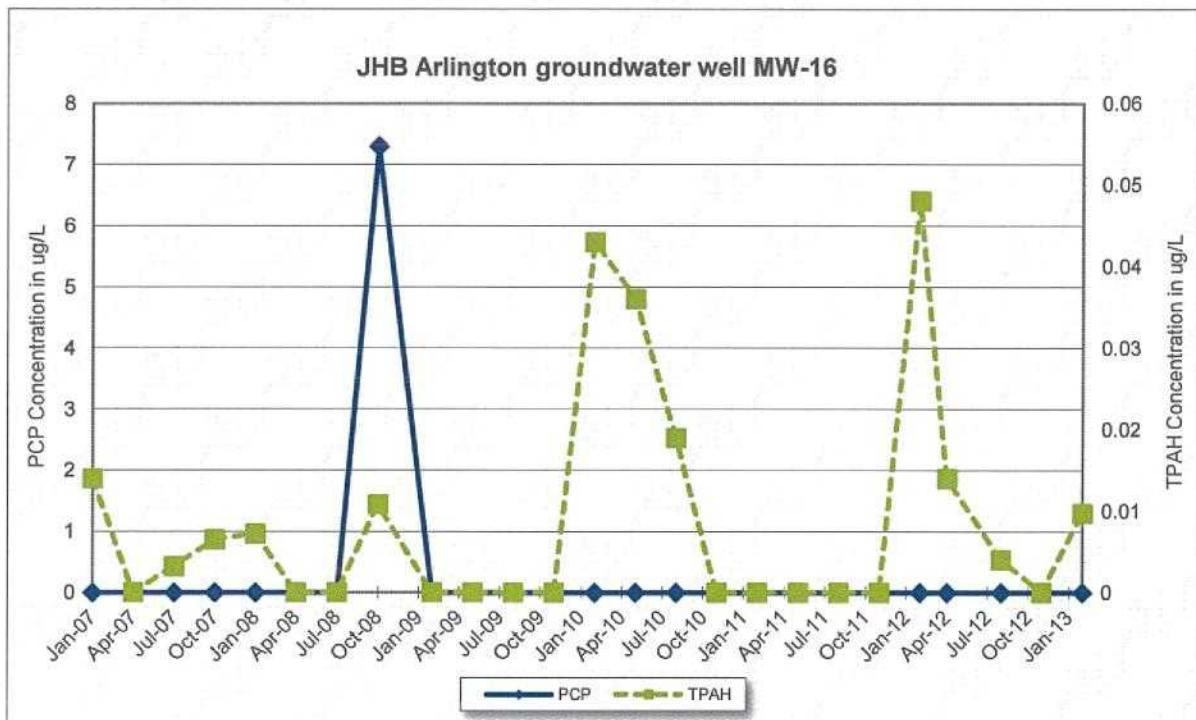
APPENDIX B

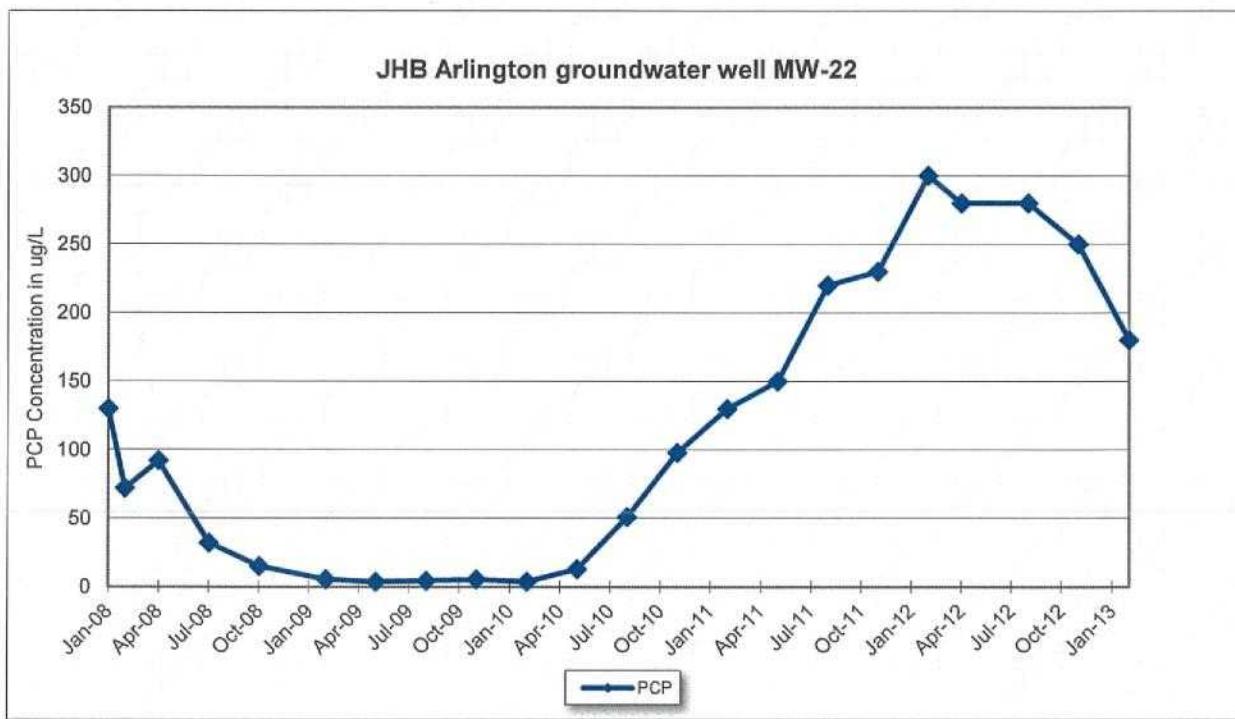
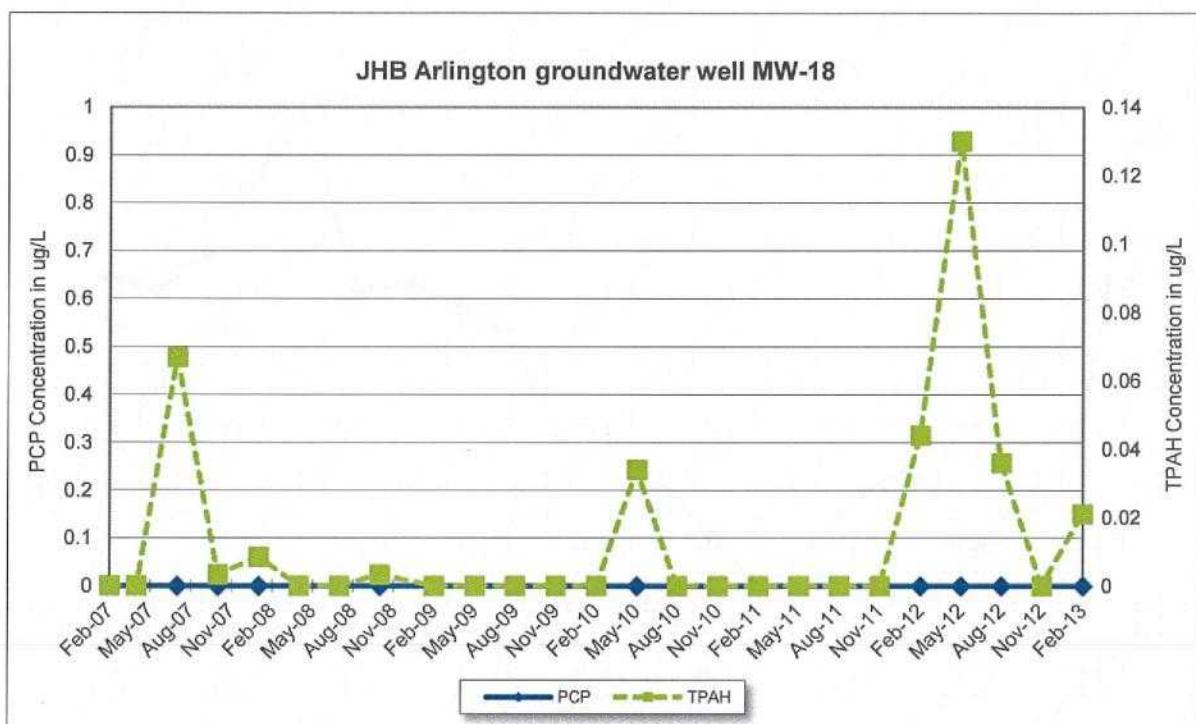
Time Series Plots - PCP and TPAH in Groundwater

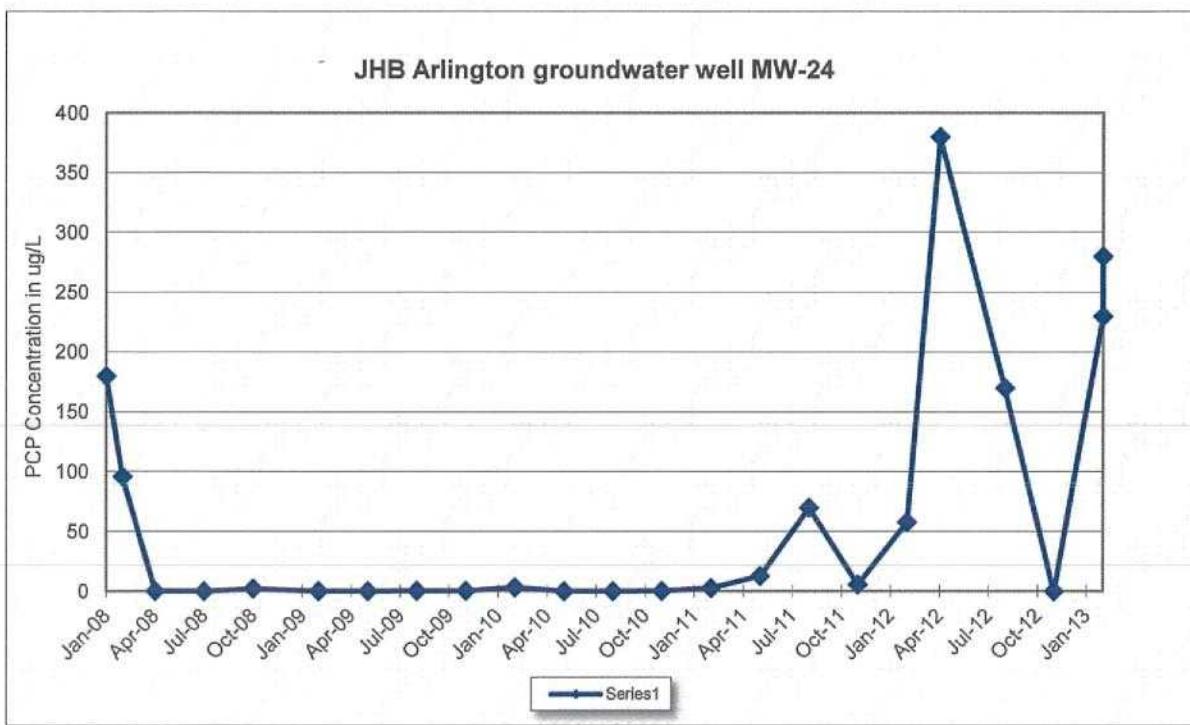
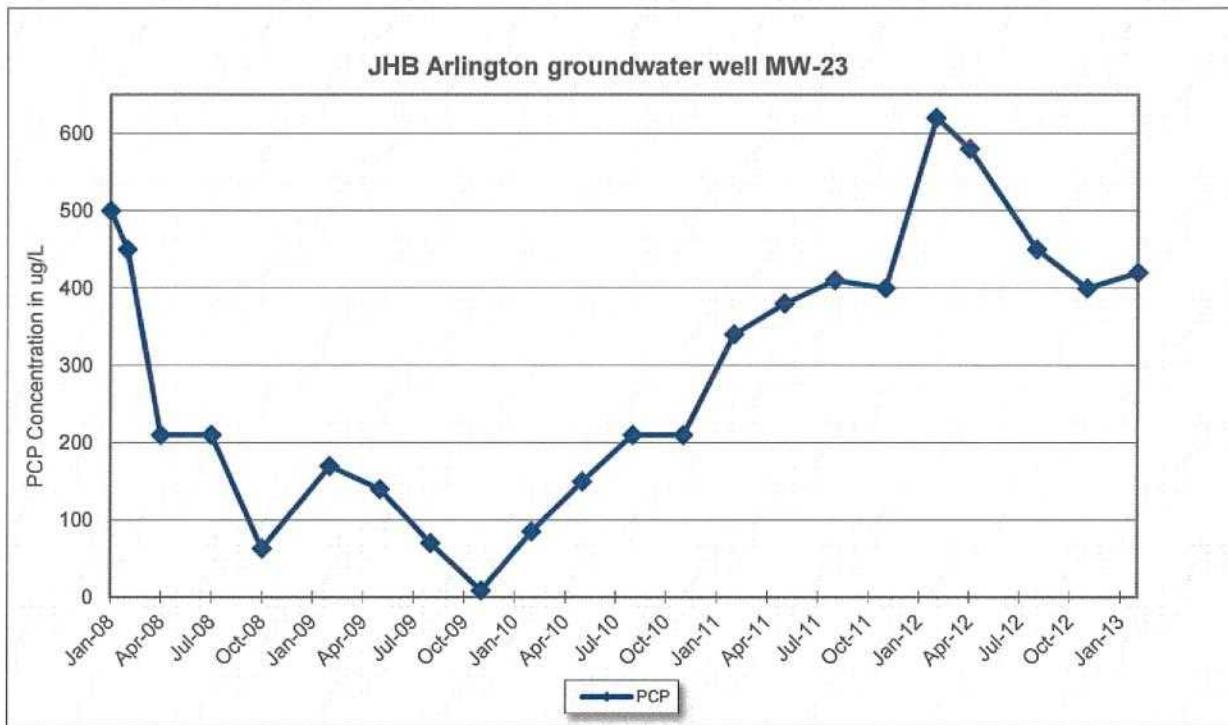


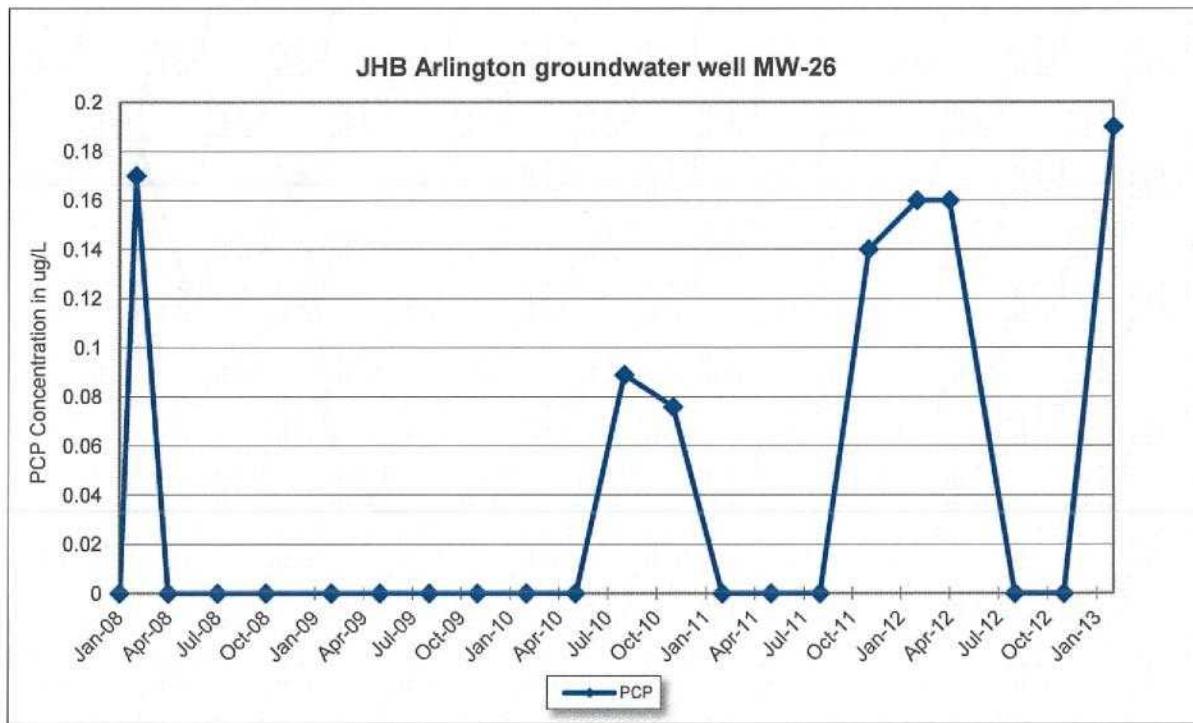
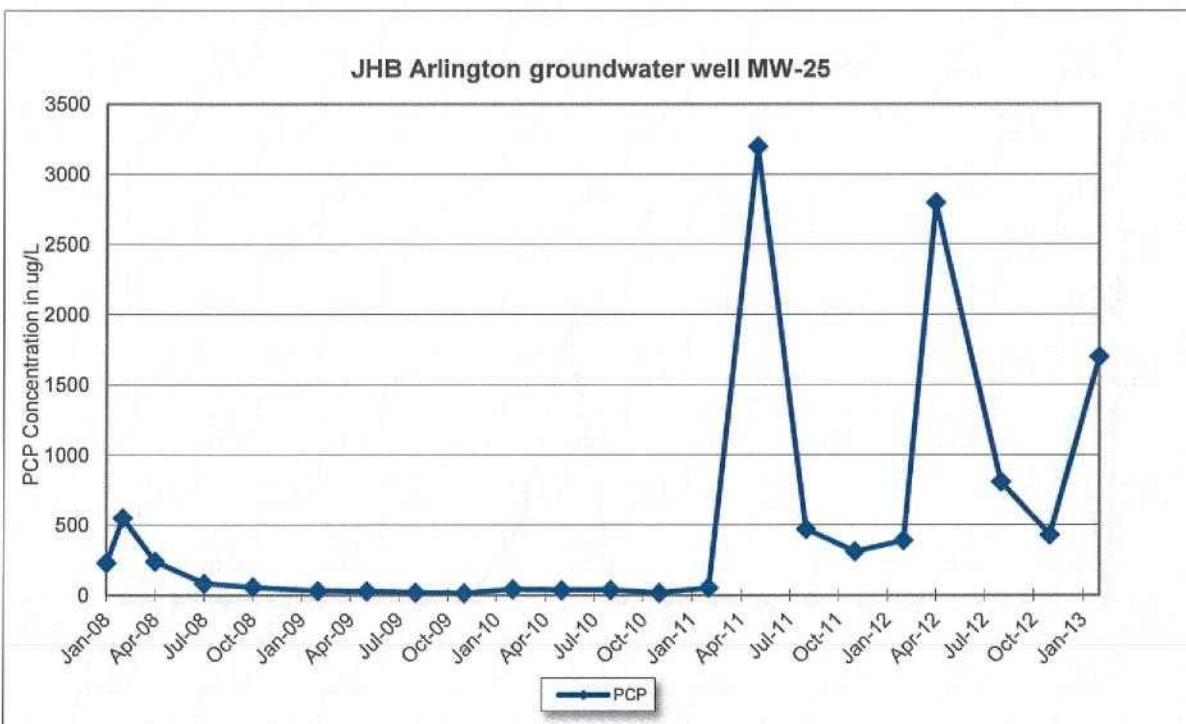




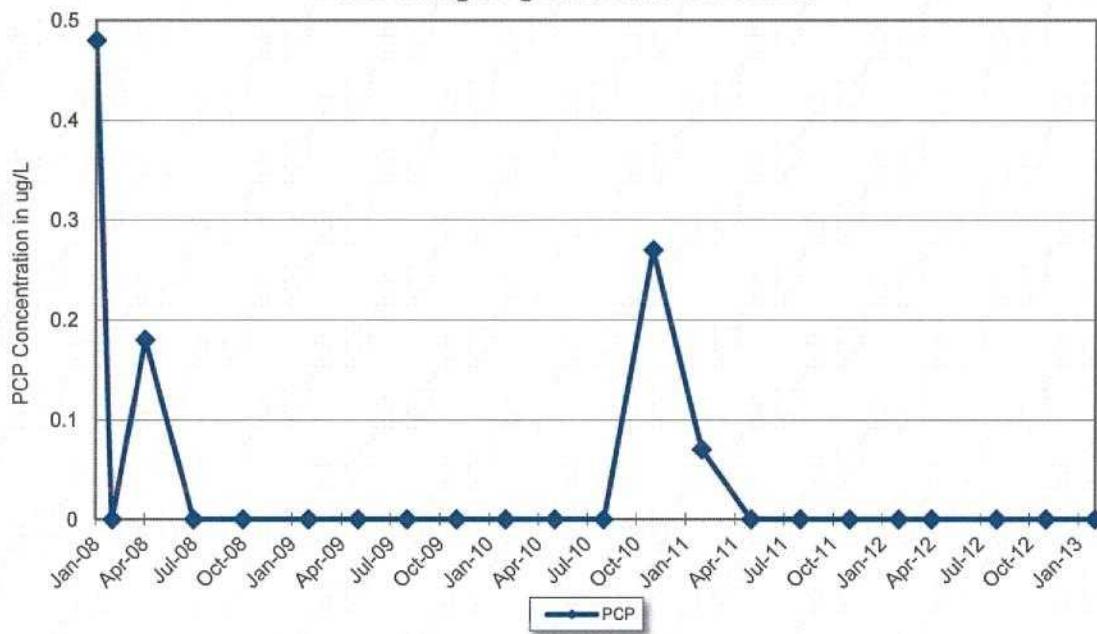




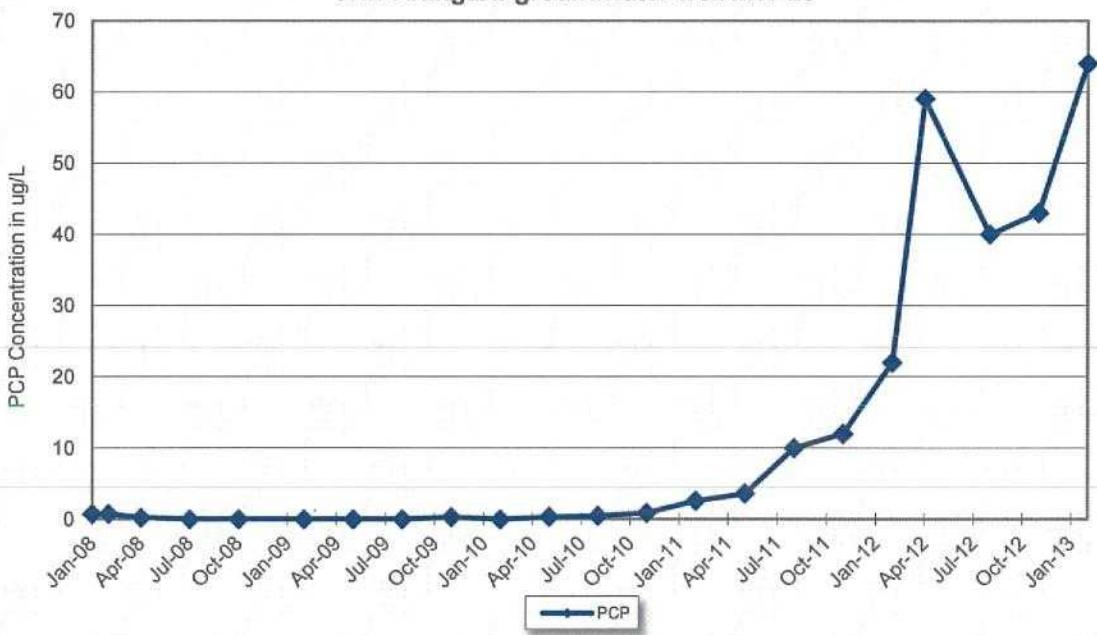


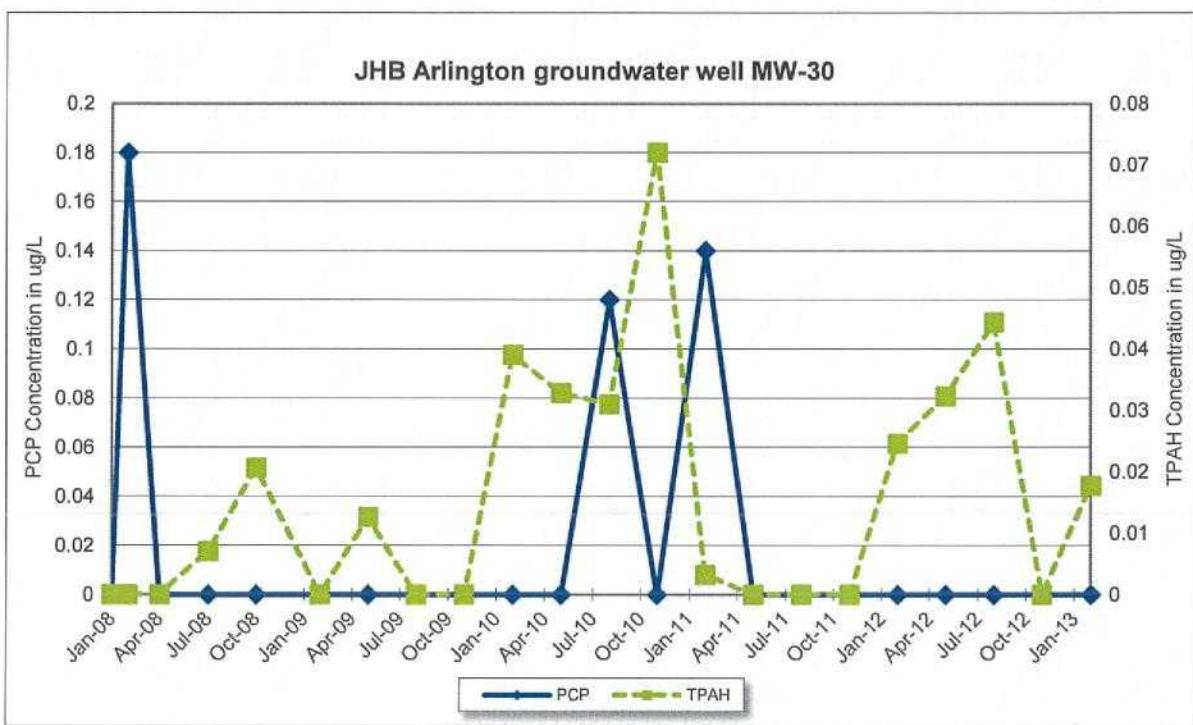
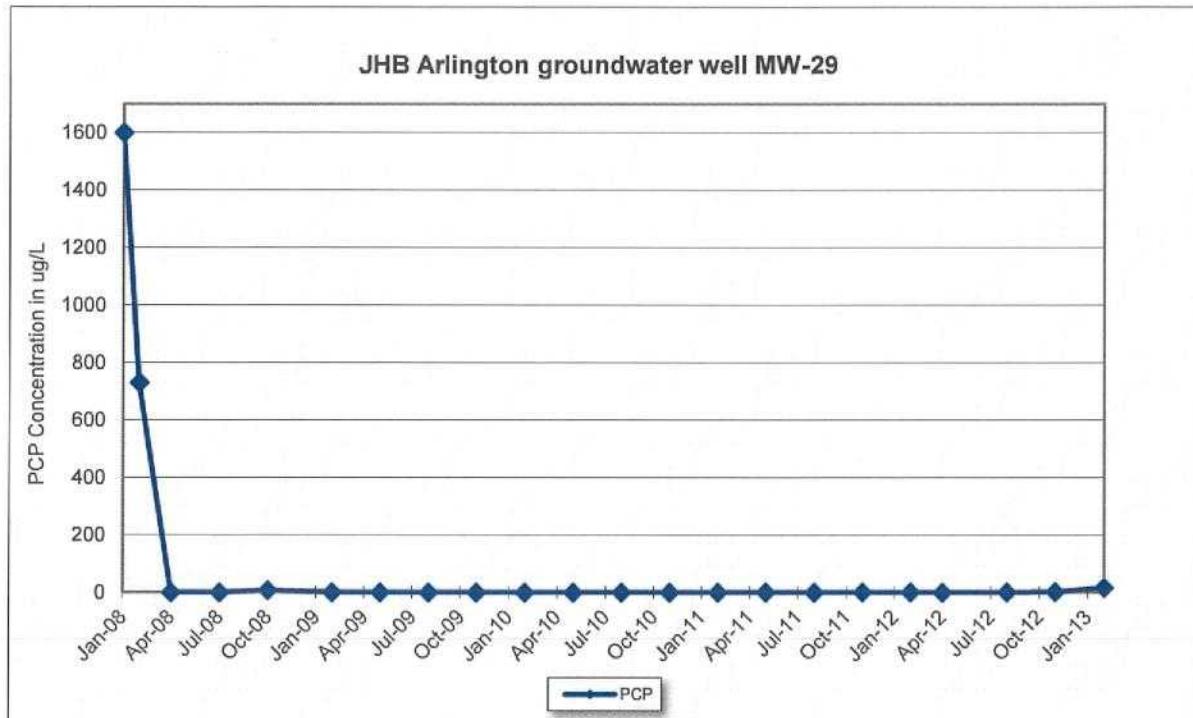


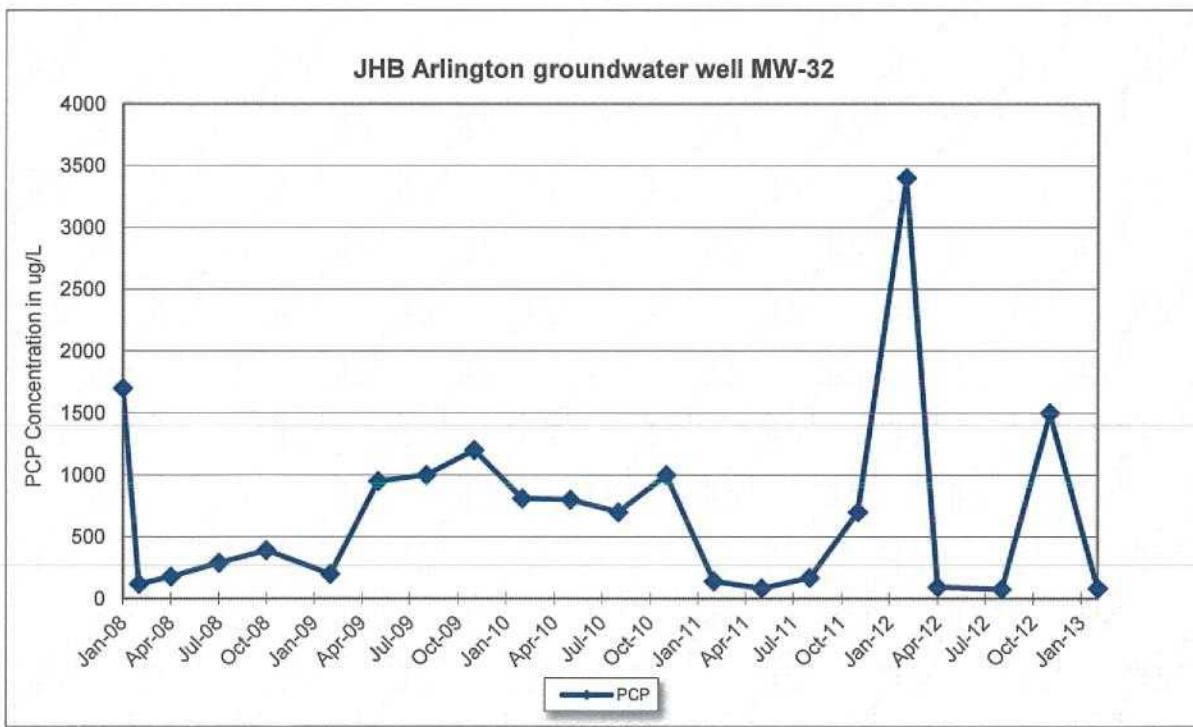
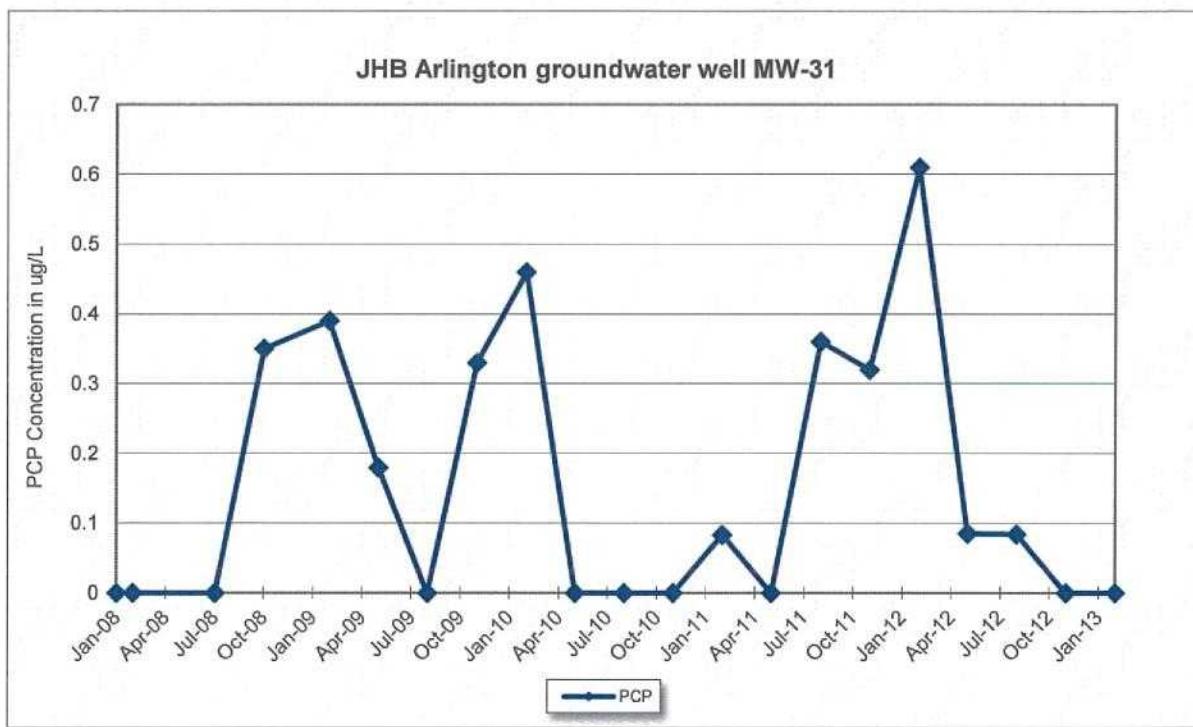
JHB Arlington groundwater well MW-27

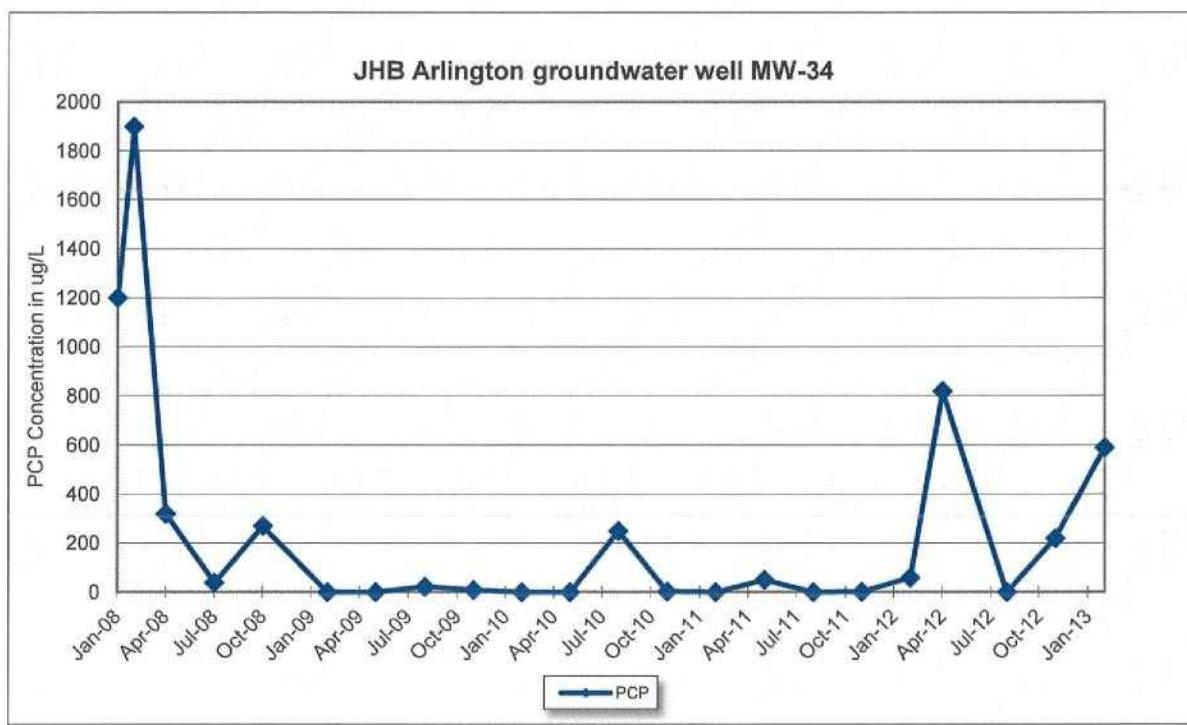
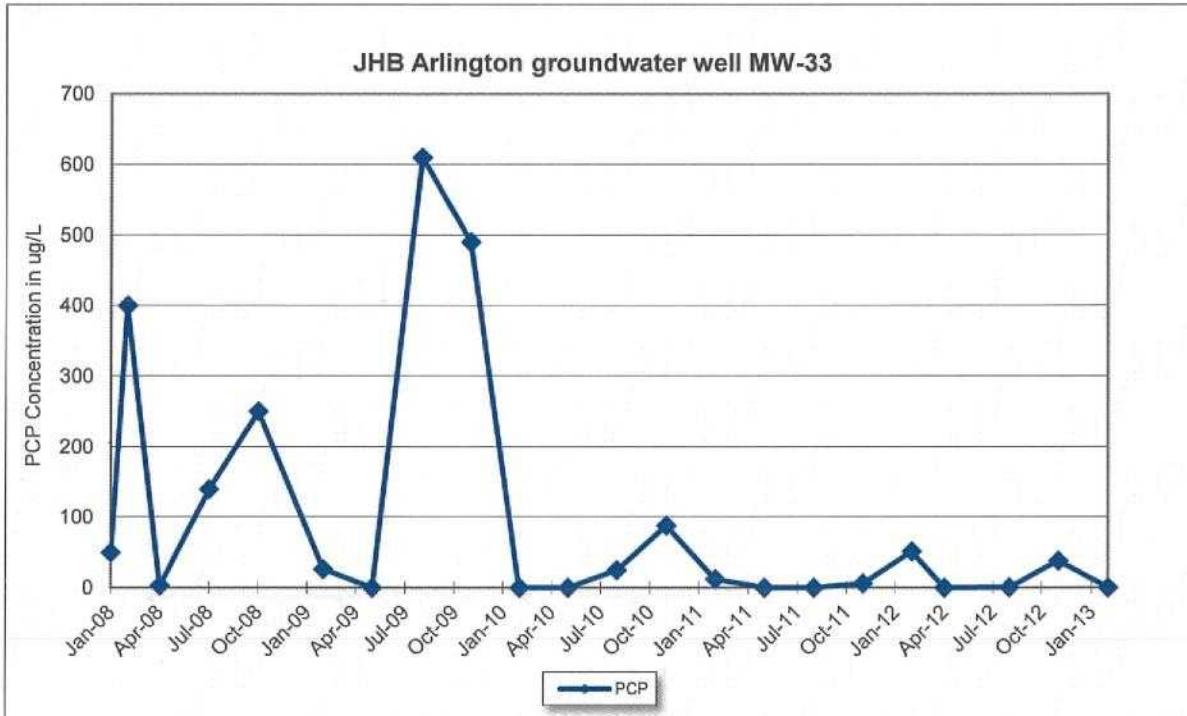


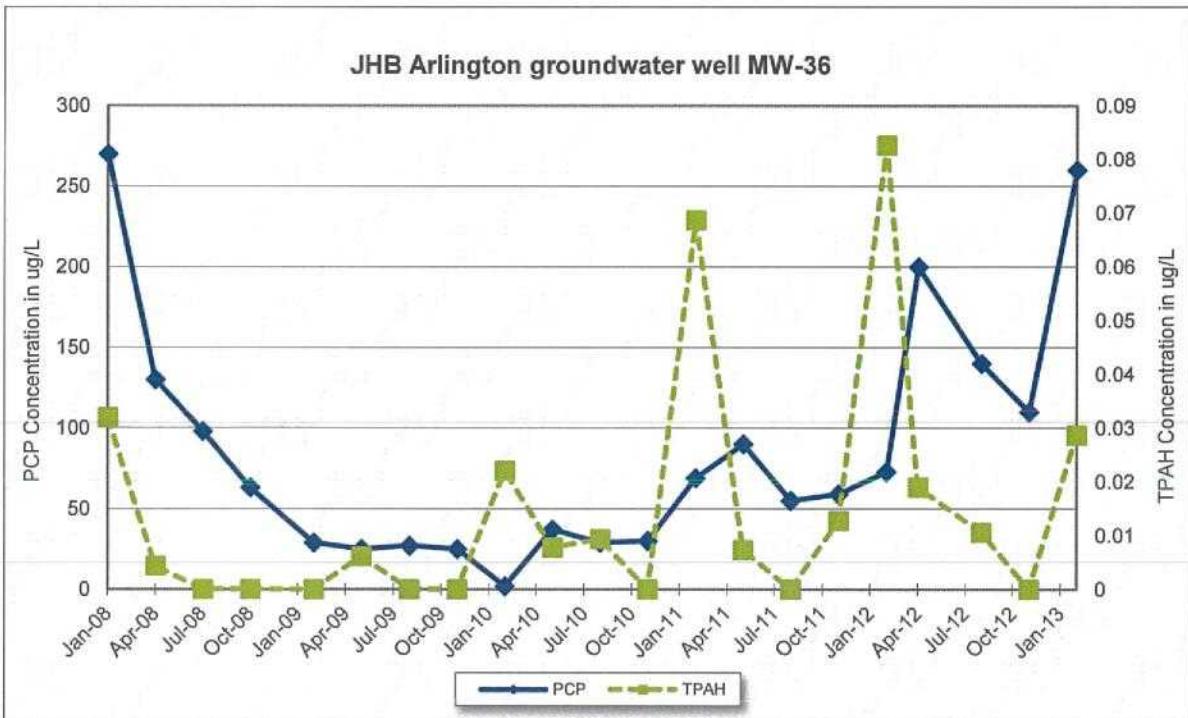
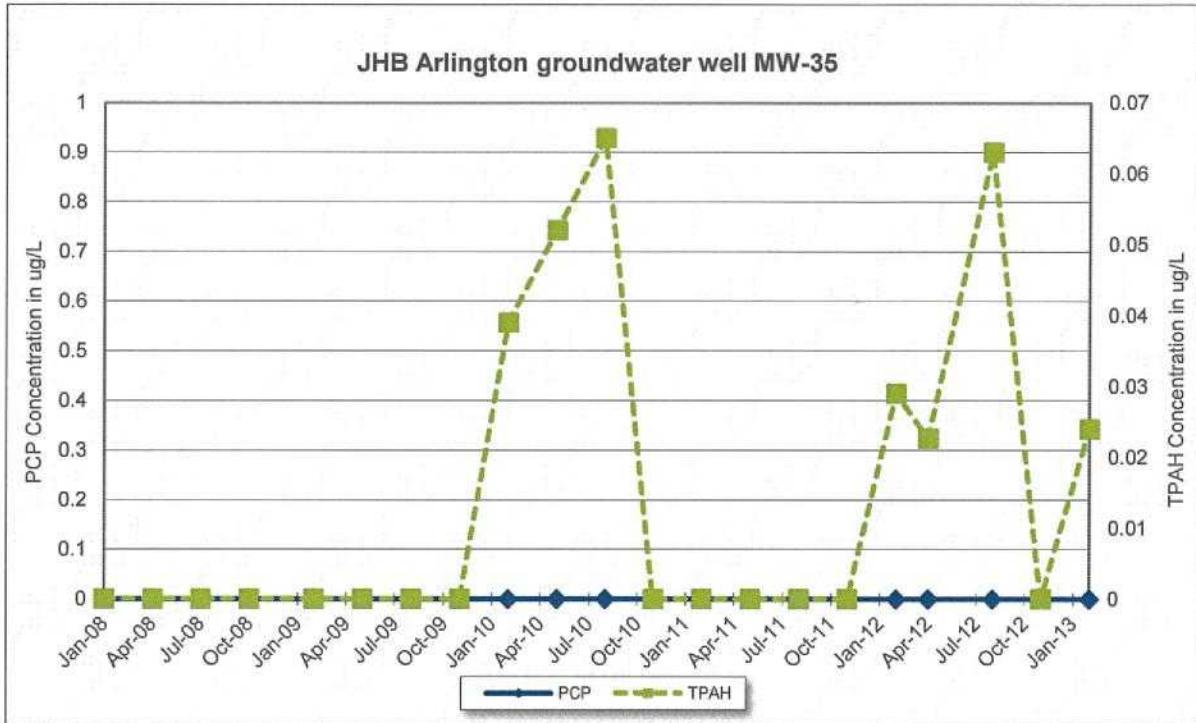
JHB Arlington groundwater well MW-28

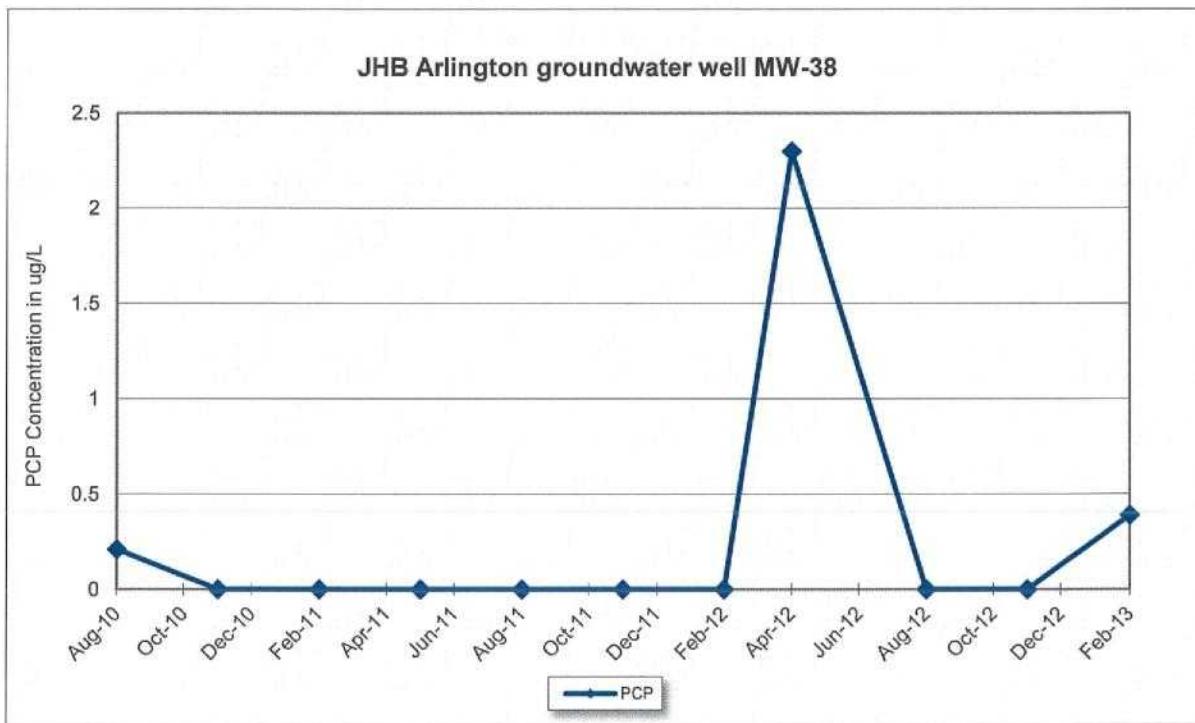
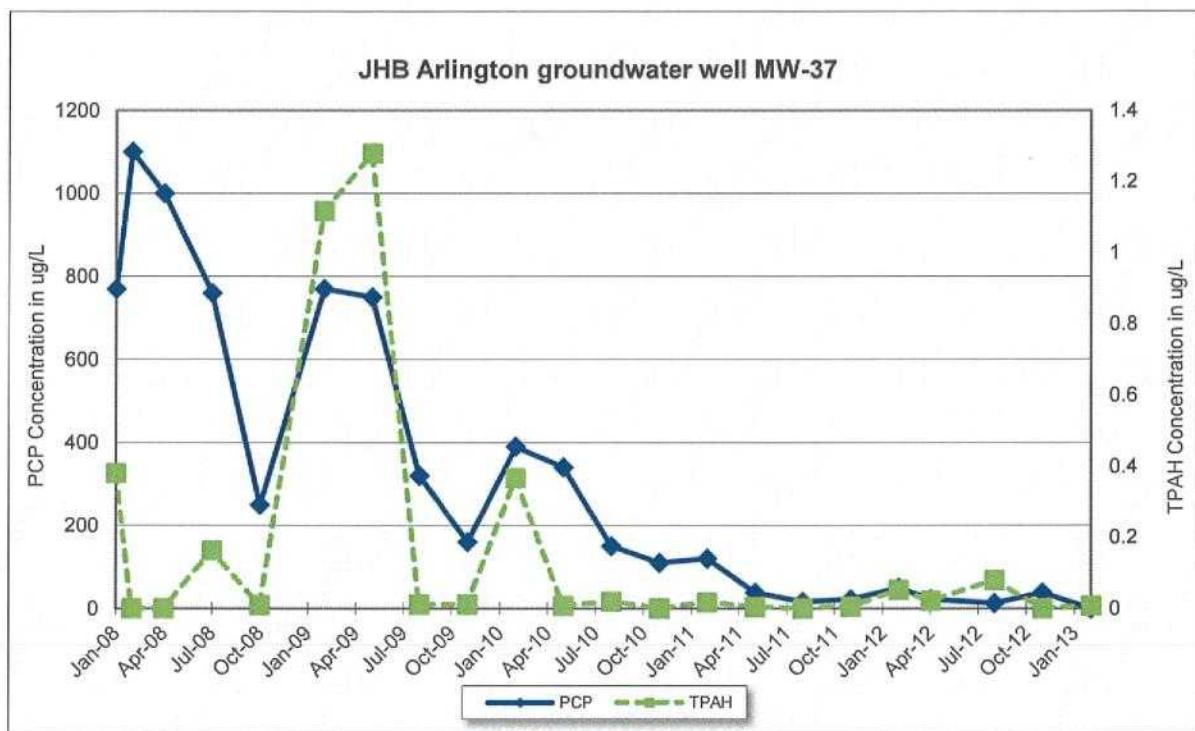


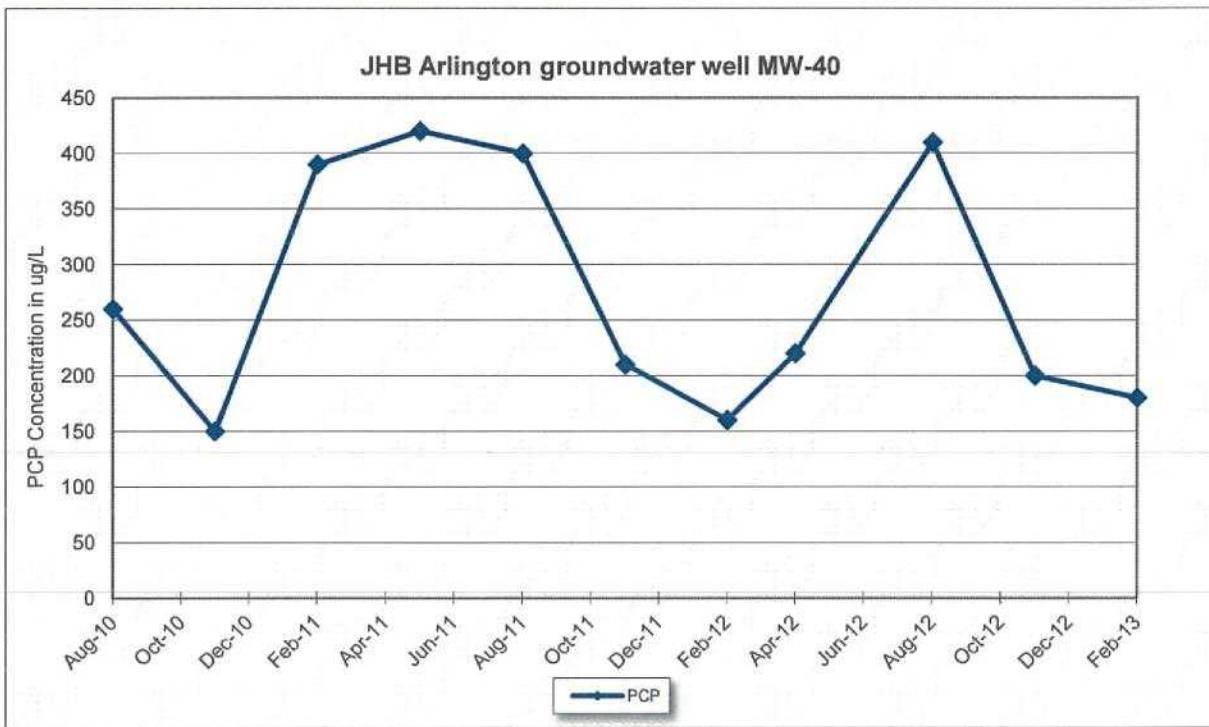
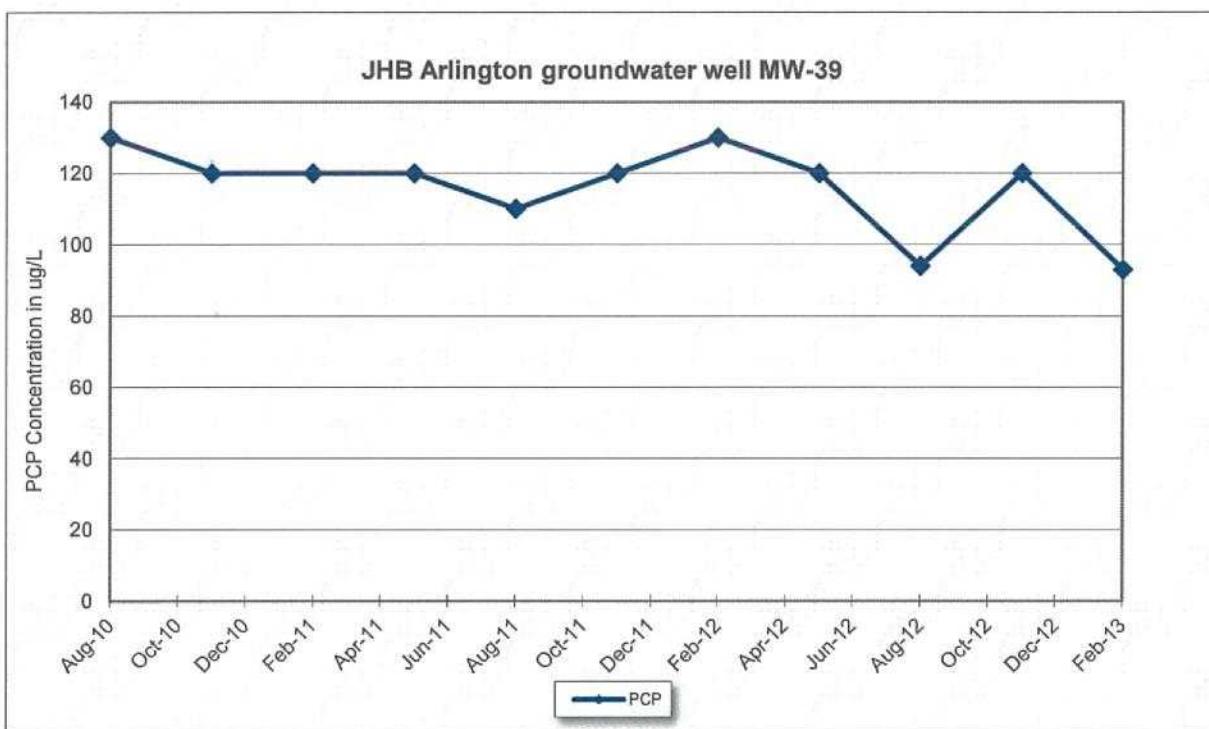


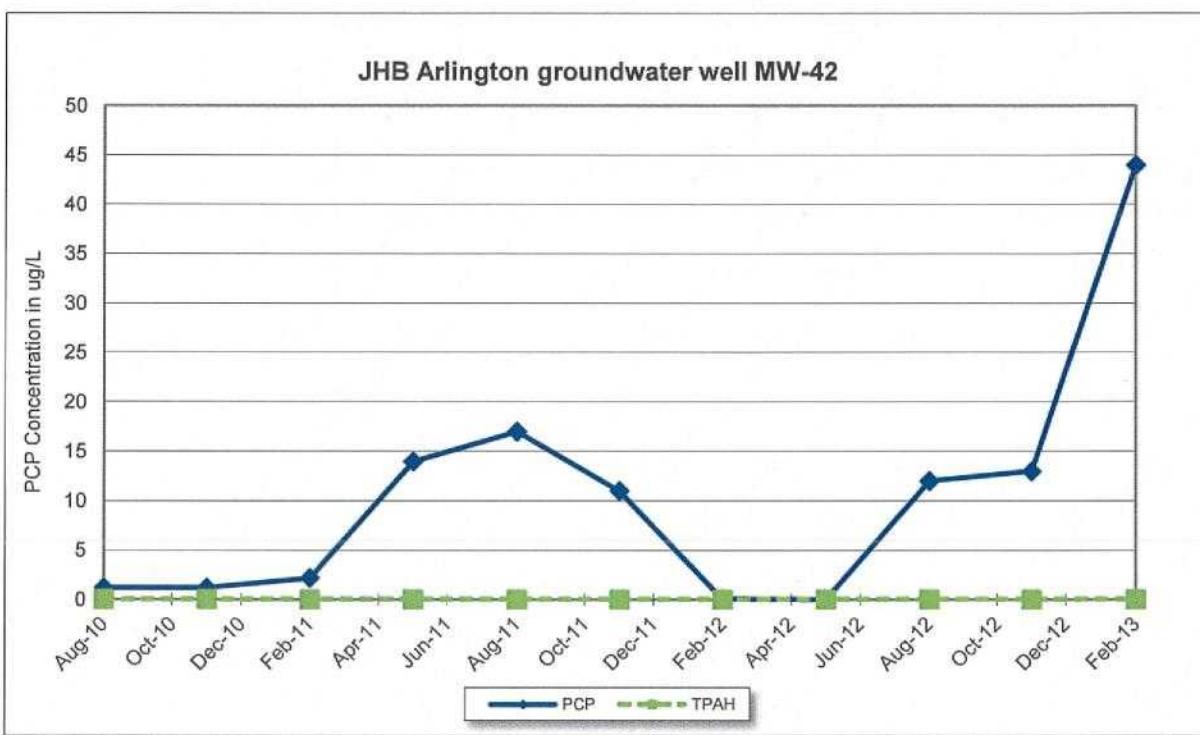
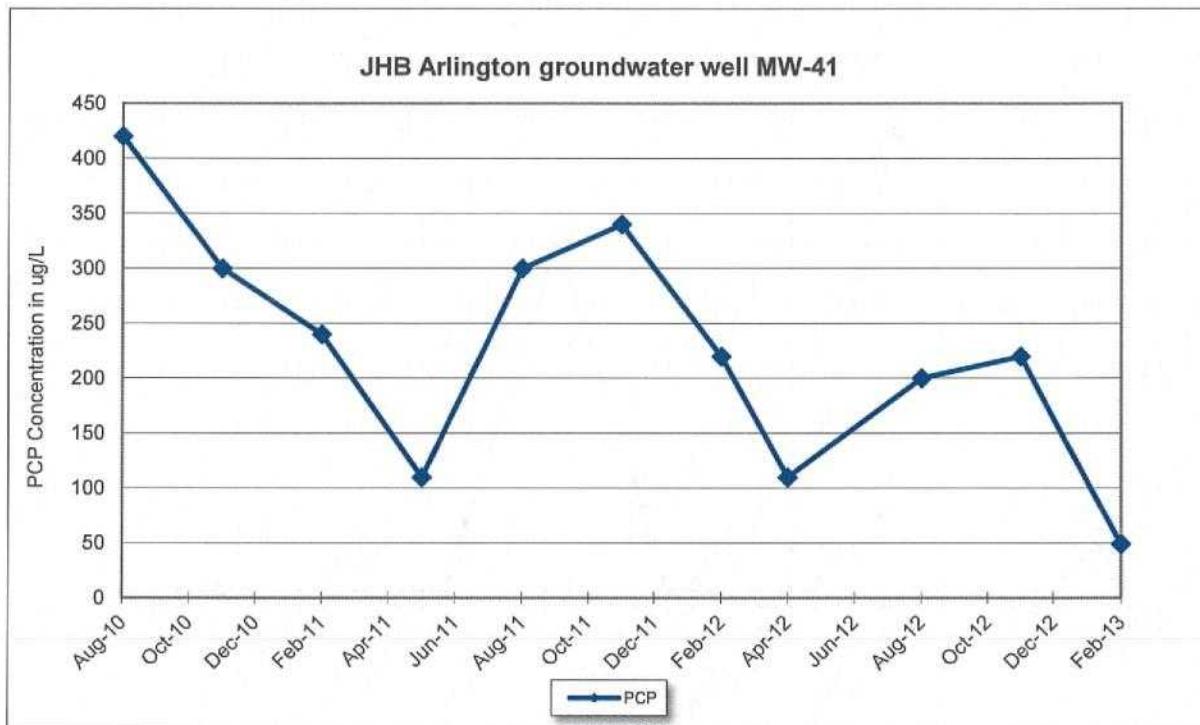


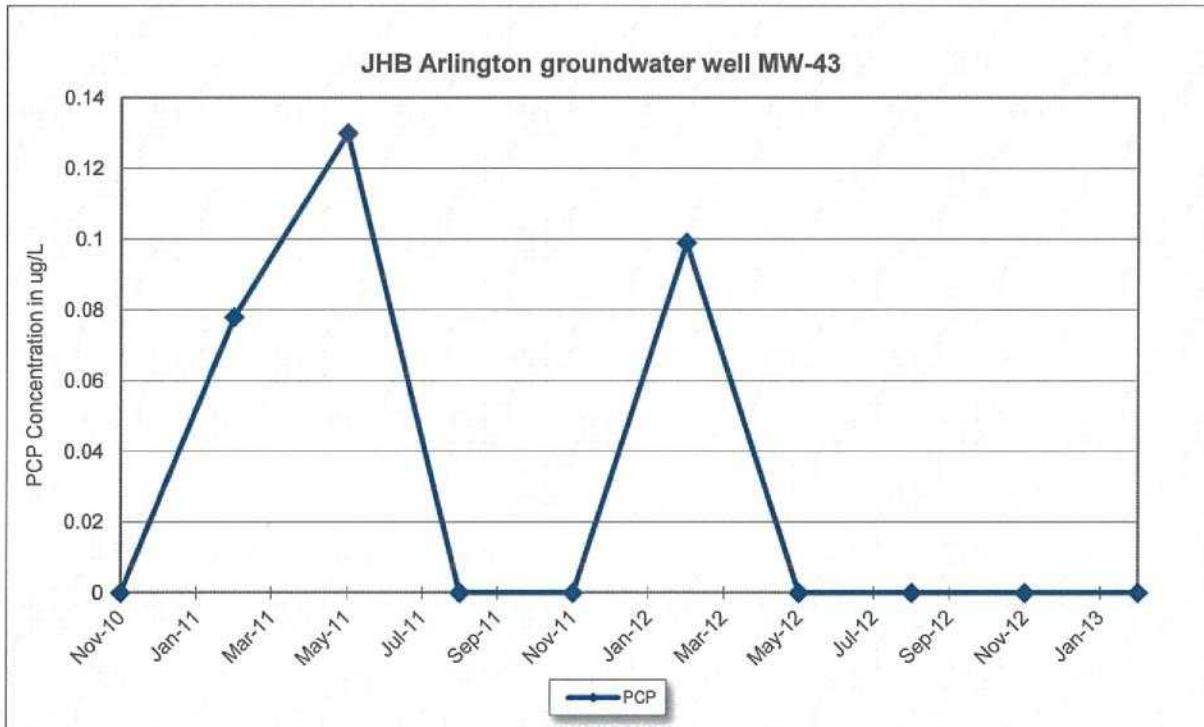




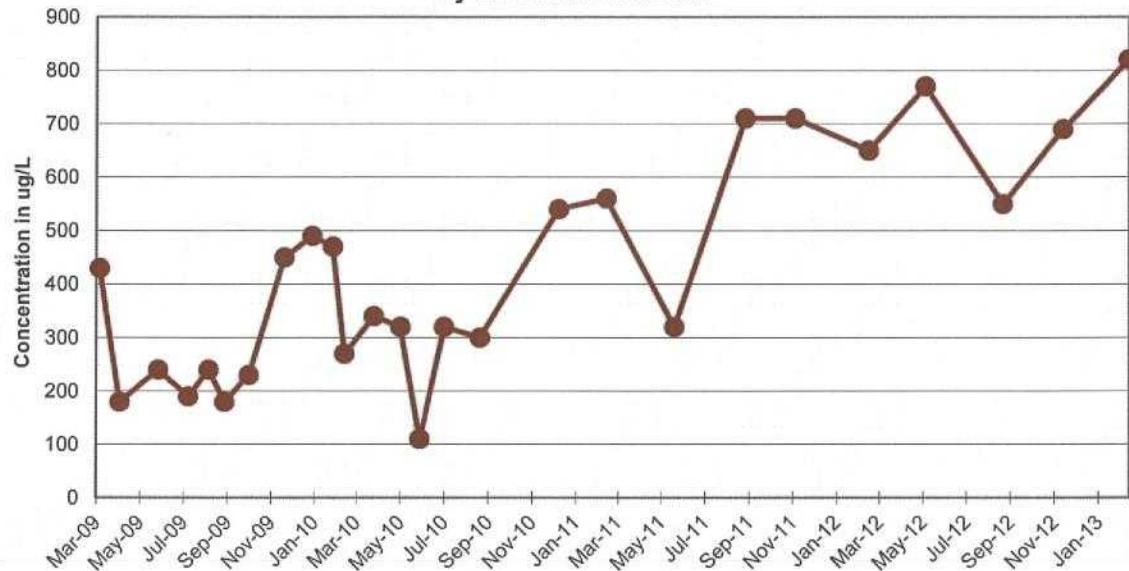






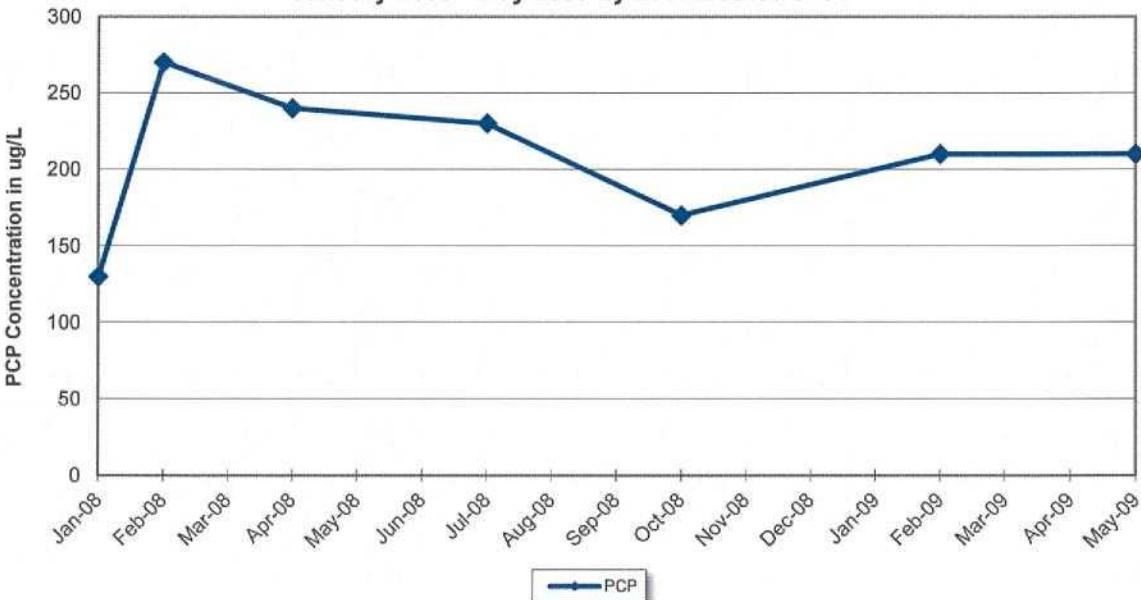


JHB Arlington extraction well composite samples - Pentachlorophenol
by EPA Method 8270D

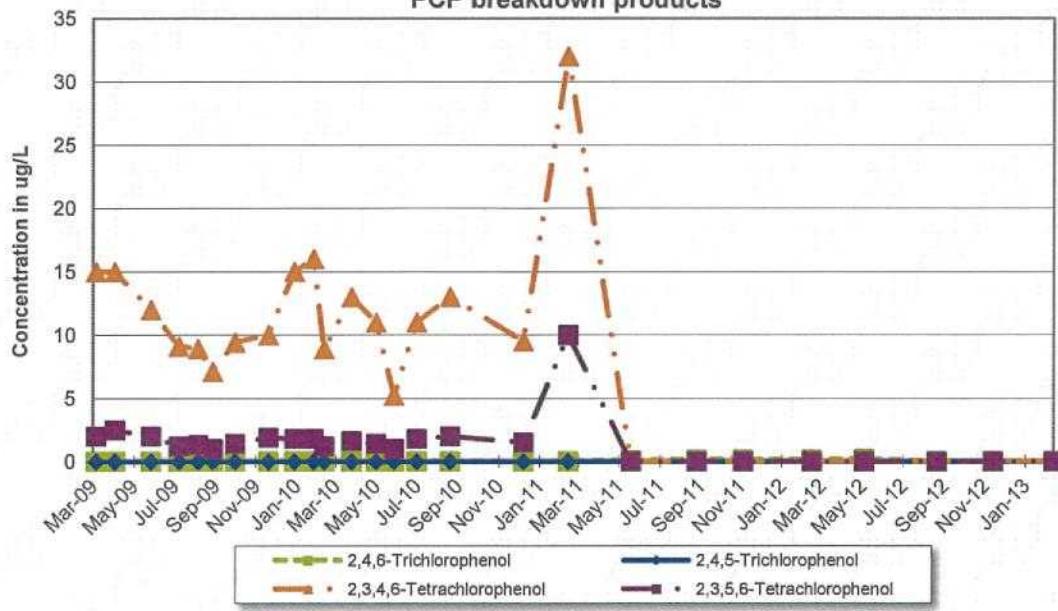


- See Table 3A for extraction wells combined in each composite sample.

JHB Arlington extraction well composite (EW1-EW7)
January 2008 - May 2009 by EPA Method 8151



JHB Arlington extraction well composite samples -
PCP breakdown products



- See Table 3A for extraction wells combined in each composite sample.



APPENDIX C

Laboratory Reports and Chain-of-Custody Documentation (Summary Only)

(CD Contains Full Version of Lab Reports)



March 5, 2013

Analytical Report for Service Request No: K1301266

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: J.H. Baxter-Arlington

Dear Scott:

Enclosed are the results of the samples submitted to our laboratory on February 13, 2013. For your reference, these analyses have been assigned our service request number K1301266.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at Chris.Leaf@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc. dba ALS Environmental

A handwritten signature of Chris Leaf, which appears to be a stylized "C" and "L" intertwined.
Chris Leaf
Project Manager

CL/mj

Page 1 of 294



ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626

PHONE +1 360 577 7222 | FAX +1 360 636 1068

Columbia Analytical Services, Inc.

Part of the ALS Group A Campbell Brothers Limited Company

Environmental

www.caslab.com • www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- ? The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- ! The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	-
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS ENVIRONMENTAL

Client: JH Baxter & Company
Project: J.H. Baxter/ Arlington
Sample Matrix: Water

Service Request No.: K1301266
Date Received: 02/13/13

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One water sample was received for analysis at ALS Environmental on 02/13/13. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Pentachlorophenol by EPA Method 8151

Elevated Detection Limits:

This sample required dilution due to the presence of elevated levels of target analyte. The reporting limits were adjusted to reflect the dilution.

The detection limit was elevated, or further elevated, for Total Tetrachlorophenols and 2,4,5-Trichlorophenol in this sample. The chromatogram indicated the presence of non-target background components. The matrix interference prevented adequate resolution of the target compounds at the normal limit. The results were flagged to indicate the matrix interference.

Matrix Spike Recovery Exceptions:

The control criteria for matrix spike recovery of Pentachlorophenol for sample EW 1-4 Comp were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

The control criteria for the matrix spike recovery of Total Tetrachlorophenols for sample EW 1-4 Comp was not applicable. The chromatogram indicated non-target matrix background components contributed to the reported matrix spike concentrations. Thus, the reported recoveries contained a high bias. Based on the magnitude of background contribution, the interference appeared to be minimal.

No other anomalies associated with the analysis of these samples were observed.

Approved by _____

Chain of Custody



29637

CHAIN OF CUSTODY

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# K1361246

COC Set _____ of _____

Page 1 OF 1 COC# _____

Project Name <i>J.H. BAXTER-Arlington</i>	Project Number _____	Project Manager _____	Number of Containers 7D 8151A Modified / 8270D / PAH SIM	Remarks <i>PCP & Breakdown Products</i>	
Company Name <i>J.H. BAXTER</i>	Company Address <i>85 N. BAXTER RD</i>	City/State/Zip <i>EUGENE, OR 97402</i>			
E-Mail Address _____	Phone # _____	FAX # _____			
Sampler Signature _____					
Sample ID <i>EW1-4 comp.</i>	Date <i>2-11</i>	Time <i>1655</i>		Lab ID <i>H2O Z X</i>	

Report Requirements		Invoice Information			
<input type="checkbox"/> I Routine Report Method Blank Surrogate as required		P.O. # <i>Bill To: JH BAXTER</i>		Circle which metals are to be analyzed Total Metals Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg Dissolved Metals Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg	
<input type="checkbox"/> II Report Dup. MS MSD as required				Special Instructions/Comments: *Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other (Circle One)	
<input type="checkbox"/> III Data Validation Report (includes all raw data)				<i>QUESTIONS Please Call: STEVE BARNETT</i> <i>503-639-3400</i>	
<input checked="" type="checkbox"/> IV CLP Deliverable Report		Turnaround Requirements 24 hr 48 hr <input checked="" type="checkbox"/> 5 Day <input checked="" type="checkbox"/> Standard (10-15 working days) <input type="checkbox"/> Provide Fax Results		Requested Report Date <i>2/12/13 1455</i>	
<input type="checkbox"/> Sample Shipment contains USDA regulated soil samples (check box if applicable)					
Relinquished By: <i>Scott Thielke JH Baxter</i>		Received By: <i>J. Holshouser 2/12/13 14:55</i>		Relinquished By: <i>J. Holshouser 2/12/13 17:30</i>	
Signature <i>Scott Thielke JH Baxter</i>		Signature <i>J. Holshouser ALS</i>		Signature <i>J. Holshouser ALS</i>	
Printed Name		Printed Name		Printed Name	
Firm		Firm		Firm	
800					
Date/Time <i>2/12/13 1455</i>		Date/Time <i>2/12/13 14:55</i>		Date/Time <i>2/12/13 17:30</i>	
Date/Time <i>2/12/13 1455</i>		Date/Time <i>2/12/13 14:55</i>		Date/Time <i>2/12/13 17:30</i>	
Date/Time <i>2/12/13 1455</i>		Date/Time <i>2/12/13 14:55</i>		Date/Time <i>2/12/13 17:30</i>	



PC CL

Cooler Receipt and Preservation Form

Client / Project: 5 H Baxter

Service Request K13 01264

Received: 5 H 2/12/13 Opened: 6+ 2/12/13 By: 5 H Unloaded: 2/13/13 By: BT

1. Samples were received via? Mail FedEx UPS DHL PDX Courier Hand Delivered

2. Samples were received in: (circle) Cooler Box Envelope Other NA

3. Were custody seals on coolers? NA Y N If yes, how many and where?

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Temp	Corr. Temp	Raw Blank	Corr. Blank	Corr. Factor	Thermometer ID	Cooler/COC ID	Tracking Number	NA	Filed
4.7	4.5	—	—	- .2	309				
8.8	8.7	7.3	7.2	- .1	307287				
5.9	5.8	—	—	- .1	282				
6.9	7.1	9.1	9.3	+ .2	298				

7. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves

8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N

9. Did all bottles arrive in good condition (unbroken)? Indicate in the table below. NA Y N

10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N

11. Did all sample labels and tags agree with custody papers? Indicate major discrepancies in the table on page 2. NA Y N

12. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N

13. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below. NA Y N

14. Were VOA vials received without headspace? Indicate in the table below. NA Y N

15. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions:

Chlorinated Phenols

Organic Analysis: Chlorinated Phenols

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.
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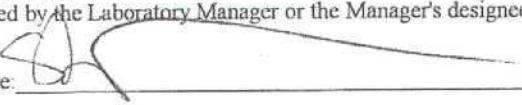
Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266

Cover Page - Organic Analysis Data Package
Chlorinated Phenols

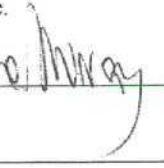
Sample Name	Lab Code	Date Collected	Date Received
EW 1-4 Comp	K1301266-001	02/11/2013	02/13/2013
EW 1-4 CompMS	KWG1301660-1	02/11/2013	02/13/2013
EW 1-4 CompDMS	KWG1301660-2	02/11/2013	02/13/2013

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: Shon May

Date: 3/14/12

Title: 

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter-Arlington
 Sample Matrix: Water

Service Request: K1301266
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Chlorinated Phenols

Sample Name: EW 1-4 Comp Units: ug/L
 Lab Code: K1301266-001 Basis: NA

Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2,4,6-Trichlorophenol	ND U	0.50	0.14	1	02/15/13	03/04/13	KWG1301660	
2,4,5-Trichlorophenol	ND Ui	1.0	0.22	1	02/15/13	03/04/13	KWG1301660	
Tetrachlorophenols, Total†	ND Ui	39	38	40	02/15/13	03/02/13	KWG1301660	
Pentachlorophenol	820 D	20	6.4	40	02/15/13	03/02/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	91	33-114	03/04/13	Acceptable

† Analyte Comments

Tetrachlorophenols, Total

This analyte cannot be separated from 2,3,4,6-Tetrachlorophenol.

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Collected: NA
Date Received: NA

Chlorinated Phenols

Sample Name: Method Blank **Units:** ug/L
Lab Code: KWG1301660-4 **Basis:** NA

Extraction Method: Method **Level:** Low
Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
2,4,6-Trichlorophenol	ND U	0.50	0.14	1	02/15/13	03/01/13	KWG1301660	
2,4,5-Trichlorophenol	ND U	1.0	0.19	1	02/15/13	03/01/13	KWG1301660	
Tetrachlorophenols, Total	ND U	1.0	0.25	1	02/15/13	03/01/13	KWG1301660	
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	74	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266

**Surrogate Recovery Summary
Chlorinated Phenols**

Extraction Method: Method
Analysis Method: 8151M

Units: PERCENT
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
EW 1-4 Comp	K1301266-001	91
Method Blank	KWG1301660-4	74
EW 1-4 CompMS	KWG1301660-1	82
EW 1-4 CompDMS	KWG1301660-2	84
Lab Control Sample	KWG1301660-3	89

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 33-114

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Extracted: 02/15/2013
Date Analyzed: 03/02/2013 -
 03/04/2013

Matrix Spike/Duplicate Matrix Spike Summary
Chlorinated Phenols

Sample Name: EW 1-4 Comp		Units: ug/L
Lab Code: K1301266-001		Basis: NA
Extraction Method: Method		Level: Low
Analysis Method: 8151M		Extraction Lot: KWG1301660

Analyte Name	Sample Result	EW 1-4 CompMS KWG1301660-1 Matrix Spike			EW 1-4 CompDMS KWG1301660-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Spike Amount	%Rec	Result	Spike Amount	%Rec			
2,4,6-Trichlorophenol	ND	7.07	10.0	71	6.72	10.0	67	26-100	5	30
2,4,5-Trichlorophenol	ND	6.42	10.0	64	6.56	10.0	66	10-103	2	30
Tetrachlorophenols, Total	ND	55.0	20.0	275 #	54.5	20.0	272 #	70-130	1	30
Pentachlorophenol	820	826	10.0	105 #	846	10.0	308 #	40-106	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013

**Lab Control Spike Summary
Chlorinated Phenols**

Extraction Method: Method
Analysis Method: 8151M

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1301660

Lab Control Sample
KWG1301660-3
Lab Control Spike

Analyte Name	Result	Spike	%Rec	%Rec Limits
		Amount	%Rec	
2,4,6-Trichlorophenol	6.72	10.0	67	30-86
2,4,5-Trichlorophenol	5.93	10.0	59	19-94
Tetrachlorophenols, Total	14.1	20.0	71	70-130
Pentachlorophenol	7.84	10.0	78	44-106

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013
Time Analyzed: 20:13

**Method Blank Summary
Chlorinated Phenols**

Sample Name: Method Blank
Lab Code: KWG1301660-4

Extraction Method: Method
Analysis Method: 8151M

Instrument ID: GC16
File ID: J:\GC16\DATA\030113PA\0301F011.D
Level: Low
Extraction Lot: KWG1301660

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1301660-3	J:\GC16\DATA\030113PA\0301F010.D	03/01/13	19:53
EW 1-4 Comp	K1301266-001	J:\GC16\DATA\030113PA\0301F088.D	03/02/13	22:57
EW 1-4 CompMS	KWG1301660-1	J:\GC16\DATA\030113PA\0301F089.D	03/02/13	23:17
EW 1-4 CompDMS	KWG1301660-2	J:\GC16\DATA\030113PA\0301F090.D	03/02/13	23:36
EW 1-4 Comp	K1301266-001	J:\GC16\DATA\030413P\0304F012.D	03/04/13	12:11
EW 1-4 CompMS	KWG1301660-1	J:\GC16\DATA\030413P\0304F013.D	03/04/13	12:31
EW 1-4 CompDMS	KWG1301660-2	J:\GC16\DATA\030413P\0304F014.D	03/04/13	12:51

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013
Time Analyzed: 19:53

**Lab Control Sample Summary
Chlorinated Phenols**

Sample Name: Lab Control Sample
Lab Code: KWG1301660-3

Instrument ID: GC16
File ID: J:\GC16\DATA\030113PA\0301F010.D

Extraction Method: Method
Analysis Method: 8151M

Level: Low
Extraction Lot: KWG1301660

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1301660-4	J:\GC16\DATA\030113PA\0301F011.D	03/01/13	20:13
EW 1-4 Comp	K1301266-001	J:\GC16\DATA\030113PA\0301F088.D	03/02/13	22:57
EW 1-4 CompMS	KWG1301660-1	J:\GC16\DATA\030113PA\0301F089.D	03/02/13	23:17
EW 1-4 CompDMS	KWG1301660-2	J:\GC16\DATA\030113PA\0301F090.D	03/02/13	23:36
EW 1-4 Comp	K1301266-001	J:\GC16\DATA\030413P\0304F012.D	03/04/13	12:11
EW 1-4 CompMS	KWG1301660-1	J:\GC16\DATA\030413P\0304F013.D	03/04/13	12:31
EW 1-4 CompDMS	KWG1301660-2	J:\GC16\DATA\030413P\0304F014.D	03/04/13	12:51

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266
Calibration Date: 03/01/2013

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-1701

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\030113P\0301F003.D	F	J:\GC16\DATA\030113P\0301F008.D
B	J:\GC16\DATA\030113P\0301F004.D	G	J:\GC16\DATA\030113P\0301F009.D
C	J:\GC16\DATA\030113P\0301F005.D	H	J:\GC16\DATA\030113P\0301F010.D
D	J:\GC16\DATA\030113P\0301F006.D	I	J:\GC16\DATA\030113P\0301F011.D
E	J:\GC16\DATA\030113P\0301F007.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
4-Bromo-2,6-dichlorophenol	A	1.0	44400	B	2.5	41600	C	5.0	47200	D	25	50800	E	50	45200
	F	75	48500	G	100	46100	H	130	46800	I	150	45000			
2,4,6-Trichlorophenol	A	0.93	60100	B	2.3	54400	C	4.7	55800	D	23	48300	E	47	41000
	F	70	43000	G	93	40300	H	120	40300	I	140	38600			
2,4,5-Trichlorophenol	A	0.93	32500	B	2.3	30400	C	4.7	31100	D	23	25600	E	47	21400
	F	70	22000	G	93	20400	H	120	20300	I	140	19300			
2,3,4,5-Tetrachlorophenol	A	0.94	57100	B	2.4	53900	C	4.7	58400	D	24	48300	E	47	40800
	F	71	42600	G	94	39700	H	120	39700	I	140	37700			
2,3,5,6-Tetrachlorophenol	A	0.94	71800	B	2.4	68000	C	4.7	71100	D	24	64000	E	47	55100
	F	71	58100	G	94	54600	H	120	54900	I	140	52500			
Pentachlorophenol	A	0.95	89000	B	2.4	83000	C	4.8	85500	D	24	73100	E	48	62000
	F	71	64800	G	95	60600	H	120	60800	I	140	58100			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-ArlingtonService Request: K1301266
Calibration Date: 03/01/2013Initial Calibration Summary
Chlorinated PhenolsCalibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	5.7		≤ 20
2,4,6-Trichlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
2,4,5-Trichlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
2,3,4,5-Tetrachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
2,3,5,6-Tetrachlorophenol	MS	AverageRF	% RSD	12.5		≤ 20
Pentachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266
Calibration Date: 03/01/2013
Date Analyzed: 03/01/2013

Second Source Calibration Verification
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12284
Units: ug/L

File ID: J:\GC16\DATA\030113P\0301F012.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2,4,6-Trichlorophenol	23	25	46900	48200	NA	6	± 20 %	Quadratic
2,4,5-Trichlorophenol	23	26	24800	26300	NA	11	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	24	25	46500	48300	NA	7	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	24	25	61100	64900	6	NA	± 20 %	AverageRF
Pentachlorophenol	24	26	70800	76100	NA	11	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266
Calibration Date: 03/01/2013

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-35

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\030113P\0301F003.D\0301R003.D	F	J:\GC16\DATA\030113P\0301F008.D\0301R008.D
B	J:\GC16\DATA\030113P\0301F004.D\0301R004.D	G	J:\GC16\DATA\030113P\0301F009.D\0301R009.D
C	J:\GC16\DATA\030113P\0301F005.D\0301R005.D	H	J:\GC16\DATA\030113P\0301F010.D\0301R010.D
D	J:\GC16\DATA\030113P\0301F006.D\0301R006.D	I	J:\GC16\DATA\030113P\0301F011.D\0301R011.D
E	J:\GC16\DATA\030113P\0301F007.D\0301R007.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
4-Bromo-2,6-dichlorophenol	A	1.0	41600	B	2.5	41000	C	5.0	44800	D	25	44100	E	50	38800
	F	75	41500	G	100	39100	H	130	39300	I	150	37800			
2,4,6-Trichlorophenol	A	0.93	49700	B	2.3	47300	C	4.7	49300	D	23	42600	E	47	35600
	F	70	37200	G	93	34600	H	120	34500	I	140	32900			
2,4,5-Trichlorophenol	A	0.93	21300	B	2.3	20600	C	4.7	22100	D	23	17900	E	47	14600
	F	70	15700	G	93	14000	H	120	14200	I	140	13300			
2,3,4,5-Tetrachlorophenol	A	0.94	49300	B	2.4	47400	C	4.7	50600	D	24	42400	E	47	35700
	F	71	36800	G	94	34300	H	120	34100	I	140	32400			
2,3,5,6-Tetrachlorophenol	A	0.94	62600	B	2.4	60800	C	4.7	65000	D	24	57400	E	47	48800
	F	71	51000	G	94	47700	H	120	47600	I	140	45500			
Pentachlorophenol	A	0.95	76200	B	2.4	72000	C	4.8	75100	D	24	63400	E	48	53400
	F	71	55000	G	95	51100	H	120	50800	I	140	48500			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter-Arlington

Service Request: K1301266
 Calibration Date: 03/01/2013

Initial Calibration Summary
Chlorinated Phenols

Calibration ID: CAL12284
 Instrument ID: GC16

Column: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	5.9		≤ 20
2,4,6-Trichlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
2,4,5-Trichlorophenol	MS	Quadratic	COD	0.997		≥ 0.99
2,3,4,5-Tetrachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
2,3,5,6-Tetrachlorophenol	MS	Quadratic(0,0)	COD	0.999		≥ 0.99
Pentachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Calibration Date: 03/01/2013
Date Analyzed: 03/01/2013**Second Source Calibration Verification**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration ID:** CAL12284
Units: ug/L**File ID:** J:\GC16\DATA\030113P\0301F012.D\0301R012.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
2,4,6-Trichlorophenol	23	25	40400	42300	NA	7	\pm 20 %	Quadratic
2,4,5-Trichlorophenol	23	26	17100	18500	NA	11	\pm 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	24	25	40300	41700	NA	5	\pm 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	24	25	54000	57300	NA	6	\pm 20 %	Quadratic(0,0)
Pentachlorophenol	24	27	60600	66000	NA	12	\pm 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

* SPCC Compound

† CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F017.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	51	46200	46900	2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	46	46900	42900	NA	-2	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	45	24800	22100	NA	-3	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	45	46500	42100	NA	-4	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	44	61100	57100	-7	NA	± 20 %	AverageRF
Pentachlorophenol	48	46	70800	64000	NA	-3	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F017.D\0301R017.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	$\pm 20\%$	AverageRF
2,4,6-Trichlorophenol	47	45	40400	37200	NA	-3	$\pm 20\%$	Quadratic
2,4,5-Trichlorophenol	47	44	17100	15200	NA	-5	$\pm 20\%$	Quadratic
2,3,4,5-Tetrachlorophenol	47	45	40300	36600	NA	-4	$\pm 20\%$	Quadratic
2,3,5,6-Tetrachlorophenol	47	45	54000	50300	NA	-4	$\pm 20\%$	Quadratic(0,0)
Pentachlorophenol	48	46	60600	54600	NA	-4	$\pm 20\%$	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F030.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	51	46200	46900	2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	46	46900	42900	NA	-2	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	45	24800	22000	NA	-4	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	45	46500	42100	NA	-4	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	44	61100	57000	-7	NA	± 20 %	AverageRF
Pentachlorophenol	48	46	70800	63900	NA	-4	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter-Arlington

Service Request: K1301266
 Date Analyzed: 03/01/2013

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
 Analysis Method: 8151M

Calibration Date: 03/01/2013
 Calibration ID: CAL12284
 Analysis Lot: KWG1301889
 Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F030.D\0301R030.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	40900	40200	-2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	45	40400	37000	NA	-3	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	45	17100	15400	NA	-3	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	46	40300	36900	NA	-3	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	45	54000	50300	NA	-4	± 20 %	Quadratic(0,0)
Pentachlorophenol	48	46	60600	55200	NA	-3	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/02/2013**Continuing Calibration Verification Summary**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F086.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	51	46200	47500	3	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	46	46900	43300	NA	-1	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	46	24800	22300	NA	-2	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	46	46500	42900	NA	-2	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	45	61100	57800	-6	NA	± 20 %	AverageRF
Pentachlorophenol	48	47	70800	65100	NA	-2	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/02/2013**Continuing Calibration Verification Summary**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F086.D\0301R086.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	45	40400	36700	NA	-4	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	44	17100	15000	NA	-6	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	46	40300	37200	NA	-2	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	45	54000	50300	NA	-4	± 20 %	Quadratic(0,0)
Pentachlorophenol	48	46	60600	55200	NA	-3	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266
Date Analyzed: 03/03/2013

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F098.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	51	46200	47200	2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	45	46900	42600	NA	-3	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	45	24800	22000	NA	-4	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	46	46500	42300	NA	-3	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	44	61100	57000	-7	NA	± 20 %	AverageRF
Pentachlorophenol	48	46	70800	64600	NA	-2	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266
Date Analyzed: 03/03/2013

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F098.D\0301R098.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	49	40900	40200	-2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	45	40400	36600	NA	-4	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	43	17100	14900	NA	-7	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	46	40300	37500	NA	-2	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	45	54000	50500	NA	-4	± 20 %	Quadratic(0,0)
Pentachlorophenol	48	47	60600	55900	NA	-2	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter-Arlington

Service Request: K1301266
 Date Analyzed: 03/04/2013

**Continuing Calibration Verification Summary
Chlorinated Phenols**

Calibration Type: External Standard
 Analysis Method: 8151M

Calibration Date: 03/01/2013
 Calibration ID: CAL12284
 Analysis Lot: KWG1301919
 Units: ug/L

File ID: J:\GC16\DATA\030413P\0304F004.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	47	46200	43800	-5	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	42	46900	39800	NA	-10	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	42	24800	20500	NA	-11	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	42	46500	39100	NA	-11	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	41	61100	52700	-14	NA	± 20 %	AverageRF
Pentachlorophenol	48	42	70800	59200	NA	-11	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Chlorinated Phenols**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F004.D\0304R004.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	48	40900	39100	-4	NA	$\pm 20\%$	AverageRF
2,4,6-Trichlorophenol	47	44	40400	36000	NA	-6	$\pm 20\%$	Quadratic
2,4,5-Trichlorophenol	47	42	17100	14400	NA	-10	$\pm 20\%$	Quadratic
2,3,4,5-Tetrachlorophenol	47	45	40300	36100	NA	-5	$\pm 20\%$	Quadratic
2,3,5,6-Tetrachlorophenol	47	44	54000	49300	NA	-6	$\pm 20\%$	Quadratic(0,0)
Pentachlorophenol	48	44	60600	53200	NA	-7	$\pm 20\%$	Quadratic

values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary
Chlorinated Phenols****Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F015.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	53	46200	48600	5	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	47	46900	43700	NA	0	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	46	24800	22500	NA	-1	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	47	46500	43200	NA	-1	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	45	61100	58300	-5	NA	± 20 %	AverageRF
Pentachlorophenol	48	47	70800	65600	NA	-1	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter-Arlington

Service Request: K1301266
 Date Analyzed: 03/04/2013

Continuing Calibration Verification Summary
Chlorinated Phenols

Calibration Type: External Standard
 Analysis Method: 8151M

Calibration Date: 03/01/2013
 Calibration ID: CAL12284
 Analysis Lot: KWG1301919
 Units: ug/L

File ID: J:\GC16\DATA\030413P\0304F015.D\0304R015.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
4-Bromo-2,6-dichlorophenol	50	51	40900	41500	2	NA	± 20 %	AverageRF
2,4,6-Trichlorophenol	47	46	40400	37700	NA	-1	± 20 %	Quadratic
2,4,5-Trichlorophenol	47	47	17100	15900	NA	0	± 20 %	Quadratic
2,3,4,5-Tetrachlorophenol	47	47	40300	38200	NA	1	± 20 %	Quadratic
2,3,5,6-Tetrachlorophenol	47	47	54000	52000	NA	-1	± 20 %	Quadratic(0,0)
Pentachlorophenol	48	48	60600	57000	NA	1	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter-Arlington

Service Request: K1301266

Analysis Run Log
Chlorinated Phenols

Analysis Method: 8151M

Analysis Lot: KWG1301889
 Instrument ID: GC16
 Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F003.D	Continuing Calibration Verification	KWG1301889-1	3/1/2013	16:37		3/1/2013	16:52
0301F004.D	Instrument Blank	KWG1301889-2	3/1/2013	16:56		3/1/2013	17:11
0301F005.D	ZZZZZZ	ZZZZZZ	3/1/2013	17:16		3/1/2013	17:31
0301F006.D	ZZZZZZ	ZZZZZZ	3/1/2013	17:36		3/1/2013	17:51
0301F007.D	ZZZZZZ	ZZZZZZ	3/1/2013	17:55		3/1/2013	18:10
0301F008.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:15		3/1/2013	18:30
0301F009.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:34		3/1/2013	18:49
0301F015.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:54		3/1/2013	19:09
0301F017.D	Continuing Calibration Verification	KWG1301889-3	3/1/2013	19:14		3/1/2013	19:29
0301F018.D	Instrument Blank	KWG1301889-4	3/1/2013	19:33		3/1/2013	19:48
0301F010.D	Lab Control Sample	KWG1301660-3	3/1/2013	19:53		3/1/2013	20:08
0301F011.D	Method Blank	KWG1301660-4	3/1/2013	20:13		3/1/2013	20:28
0301F020.D	ZZZZZZ	ZZZZZZ	3/1/2013	20:32		3/1/2013	20:47
0301F021.D	ZZZZZZ	ZZZZZZ	3/1/2013	20:52		3/1/2013	21:07
0301F022.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:12		3/1/2013	21:27
0301F023.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:31		3/1/2013	21:46
0301F024.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:51		3/1/2013	22:06
0301F025.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:10		3/1/2013	22:25
0301F026.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:30		3/1/2013	22:45
0301F027.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:50		3/1/2013	23:05
0301F028.D	ZZZZZZ	ZZZZZZ	3/1/2013	23:09		3/1/2013	23:24
0301F029.D	Instrument Blank	KWG1301889-5	3/1/2013	23:29		3/1/2013	23:44
0301F030.D	Continuing Calibration Verification	KWG1301889-6	3/1/2013	23:49		3/2/2013	00:04
0301F031.D	Instrument Blank	KWG1301889-7	3/2/2013	00:08		3/2/2013	00:23
0301F032.D	ZZZZZZ	ZZZZZZ	3/2/2013	01:26		3/2/2013	01:41
0301F033.D	ZZZZZZ	ZZZZZZ	3/2/2013	01:46		3/2/2013	02:01
0301F034.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:05		3/2/2013	02:20
0301F035.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:25		3/2/2013	02:40
0301F036.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:44		3/2/2013	02:59
0301F037.D	Instrument Blank	KWG1301889-8	3/2/2013	03:04		3/2/2013	03:19
0301F038.D	Continuing Calibration Verification	KWG1301889-9	3/2/2013	03:24		3/2/2013	03:39
0301F039.D	Instrument Blank	KWG1301889-10	3/2/2013	03:43		3/2/2013	03:58
0301F040.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:03		3/2/2013	04:18
0301F041.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:22		3/2/2013	04:37

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington

Service Request: K1301266

Analysis Run Log
Chlorinated Phenols

Analysis Method: 8151M

Analysis Lot: KWG1301889
Instrument ID: GC16
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F042.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:42		3/2/2013	04:57
0301F043.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:01		3/2/2013	05:16
0301F044.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:21		3/2/2013	05:36
0301F045.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:40		3/2/2013	05:55
0301F046.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:00		3/2/2013	06:15
0301F047.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:20		3/2/2013	06:35
0301F048.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:39		3/2/2013	06:54
0301F049.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:59		3/2/2013	07:14
0301F050.D	Instrument Blank	KWG1301889-11	3/2/2013	07:18		3/2/2013	07:33
0301F051.D	Continuing Calibration Verification	KWG1301889-12	3/2/2013	07:38		3/2/2013	07:53
0301F052.D	Instrument Blank	KWG1301889-13	3/2/2013	07:58		3/2/2013	08:13
0301F053.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:17		3/2/2013	08:32
0301F054.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:37		3/2/2013	08:52
0301F055.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:56		3/2/2013	09:11
0301F056.D	ZZZZZZ	ZZZZZZ	3/2/2013	09:16		3/2/2013	09:31
0301F057.D	ZZZZZZ	ZZZZZZ	3/2/2013	09:36		3/2/2013	09:51
0301F058.D	Instrument Blank	KWG1301889-14	3/2/2013	09:55		3/2/2013	10:10
0301F059.D	Continuing Calibration Verification	KWG1301889-15	3/2/2013	10:15		3/2/2013	10:30
0301F060.D	Instrument Blank	KWG1301889-16	3/2/2013	10:34		3/2/2013	10:49
0301F061.D	ZZZZZZ	ZZZZZZ	3/2/2013	14:43		3/2/2013	14:58
0301F062.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:03		3/2/2013	15:18
0301F063.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:23		3/2/2013	15:38
0301F064.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:42		3/2/2013	15:57
0301F065.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:02		3/2/2013	16:17
0301F066.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:22		3/2/2013	16:37
0301F067.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:43		3/2/2013	16:58
0301F069.D	ZZZZZZ	ZZZZZZ	3/2/2013	17:22		3/2/2013	17:37
0301F071.D	Instrument Blank	KWG1301889-17	3/2/2013	17:42		3/2/2013	17:57
0301F072.D	Continuing Calibration Verification	KWG1301889-18	3/2/2013	18:01		3/2/2013	18:16
0301F073.D	Instrument Blank	KWG1301889-19	3/2/2013	18:21		3/2/2013	18:36
0301F086.D	Continuing Calibration Verification	KWG1301889-21	3/2/2013	22:18		3/2/2013	22:33
0301F087.D	Instrument Blank	KWG1301889-22	3/2/2013	22:38		3/2/2013	22:53
0301F088.D	EW 1-4 Comp	K1301266-001	3/2/2013	22:57		3/2/2013	23:12
0301F089.D	EW 1-4 CompMS	KWG1301660-1	3/2/2013	23:17		3/2/2013	23:32

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266**Analysis Run Log**
Chlorinated Phenols**Analysis Method:** 8151M**Analysis Lot:** KWG1301889
Instrument ID: GC16
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F090.D	EW 1-4 CompDMS	KWG1301660-2	3/2/2013	23:36		3/2/2013	23:51
0301F095.D	ZZZZZZ	ZZZZZZ	3/3/2013	01:14		3/3/2013	01:29
0301F097.D	Instrument Blank	KWG1301889-23	3/3/2013	01:54		3/3/2013	02:09
0301F098.D	Continuing Calibration Verification	KWG1301889-24	3/3/2013	02:13		3/3/2013	02:28
0301F099.D	Instrument Blank	KWG1301889-25	3/3/2013	02:33		3/3/2013	02:48
0301F100.D	ZZZZZZ	ZZZZZZ	3/3/2013	02:52		3/3/2013	03:07
0301F102.D	ZZZZZZ	ZZZZZZ	3/3/2013	03:32		3/3/2013	03:47
0301F103.D	ZZZZZZ	ZZZZZZ	3/3/2013	03:51		3/3/2013	04:06
0301F104.D	ZZZZZZ	ZZZZZZ	3/3/2013	04:11		3/3/2013	04:26
0301F105.D	Instrument Blank	KWG1301889-26	3/3/2013	04:30		3/3/2013	04:45
0301F106.D	Continuing Calibration Verification	KWG1301889-27	3/3/2013	04:50		3/3/2013	05:05
0301F107.D	Instrument Blank	KWG1301889-28	3/3/2013	05:09		3/3/2013	05:24

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington**Service Request:** K1301266**Analysis Run Log**
Chlorinated Phenols**Analysis Method:** 8151M**Analysis Lot:** KWG1301919**Instrument ID:** GC16**Column:** Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0304F004.D	Continuing Calibration Verification	KWG1301919-1	3/4/2013	09:34		3/4/2013	09:49
0304F005.D	Instrument Blank	KWG1301919-2	3/4/2013	09:54		3/4/2013	10:09
0304F006.D	ZZZZZZ	ZZZZZZ	3/4/2013	10:14		3/4/2013	10:29
0304F008.D	ZZZZZZ	ZZZZZZ	3/4/2013	10:53		3/4/2013	11:08
0304F010.D	ZZZZZZ	ZZZZZZ	3/4/2013	11:32		3/4/2013	11:47
0304F012.D	EW 1-4 Comp	K1301266-001	3/4/2013	12:11		3/4/2013	12:26
0304F013.D	EW 1-4 CompMS	KWG1301660-1	3/4/2013	12:31		3/4/2013	12:46
0304F014.D	EW 1-4 CompDMS	KWG1301660-2	3/4/2013	12:51		3/4/2013	13:06
0304F015.D	Continuing Calibration Verification	KWG1301919-3	3/4/2013	13:10		3/4/2013	13:25
0304F016.D	Instrument Blank	KWG1301919-4	3/4/2013	13:30		3/4/2013	13:45

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Extracted: 02/15/2013

Extraction Prep Log
Chlorinated Phenols

Extraction Method: Method
Analysis Method: 8151M

Extraction Lot: KWG1301660
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
EW 1-4 Comp	K1301266-001	02/11/13	02/13/13	5mL	1mL	NA	
EW 1-4 CompDL	K1301266-001	02/11/13	02/13/13	5mL	1mL	NA	
Method Blank	KWG1301660-4	NA	NA	5mL	1mL	NA	
EW 1-4 CompMS	KWG1301660-1	02/11/13	02/13/13	5mL	1mL	NA	
EW 1-4 CompDMS	KWG1301660-2	02/11/13	02/13/13	5mL	1mL	NA	
Lab Control Sample	KWG1301660-3	NA	NA	5mL	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

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Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter-Arlington
Sample Matrix: Water

Service Request: K1301266
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Chlorinated Phenols

Sample Name: EW 1-4 Comp Units: ug/L
Lab Code: K1301266-001 Basis: NA
Extraction Method: Method Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	20	6.4	820	830	1.2	D	40	03/02/13



March 5, 2013

Analytical Report for Service Request No: K1301272

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: J.H. Baxter/Arlington

Dear Scott:

Enclosed are the results of the samples submitted to our laboratory on February 13, 2013. For your reference, these analyses have been assigned our service request number K1301272.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at Chris.Leaf@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc. dba ALS Environmental

A handwritten signature of "Chris Leaf" over a stylized oval.
Chris Leaf
Project Manager
CL/mj

Page 1 of 677



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Environmental

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RIGHT SOLUTIONS RIGHT PARTNER

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

**Columbia Analytical Services, Inc. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses**

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehillabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepl.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	1704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Case Narrative

ALS ENVIRONMENTAL

Client: JH Baxter & Company
Project: J.H. Baxter/ Arlington
Sample Matrix: Water

Service Request No.: K1301272
Date Received: 02/13/13

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples were received for analysis at ALS Environmental on 02/13/13. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Pentachlorophenol by EPA Method 8151

Elevated Detection Limits:

A couple field sample required dilution due to the presence of elevated levels of target analyte. The reporting limits were adjusted to reflect the dilution.

Matrix Spike Recovery Exceptions:

The control criteria for matrix spike recovery of Pentachlorophenol for sample Batch QC were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270

Calibration Verification Exceptions:

The following analytes were flagged as outside the upper control criterion for Continuing Calibration Verification (CCV) MS11\1227F003.D: Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene. In accordance with the EPA Method 8270D, 80% or more of the CCV analytes must have passed within 20% of the true value. The remaining analytes are allowed a 40% difference as per the ALS SOP. The CCV met these criteria. The data quality was not affected. No further corrective action was required.

Sample Notes and Discussion:

Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Approved by



Chain of Custody



29637

CHAIN OF CUSTODY

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

SR# K1301272

COC Set _____ of _____

Page 1 OF 1 COC#

Project Name J.H. BAXTER / ARLINGTON				
Project Number				
Project Manager				
Company Name J.H. BAXTER				
Company Address 85 N. BAXTER RD				
City/State/Zip EUGENE, OR. 97402				
E-Mail Address				
Phone #		FAX #		
Sampler Signature				
Sample ID	Date	Time	Lab ID	Matrix
BXS-1	2/12	0817	H ₂ O	2 XX
BXS-2		0908		
BXS-5		0817		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Number of Containers	7D		Remarks
	8151A Modified / PCP Only	8270D / PAH SIM	
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

Report Requirements

- I Routine Report Method
Blank Surrogate as required
- II Report Dup MS MSD as required
- III Data Validation Report (includes all raw data)
- IV CLP Deliverable Report
- V EDD

Invoice Information

P.O.#
Bill To: **JH BAXTER**

Turnaround Requirements

- 24 hr 48 hr
 5 Day Standard (10-15 working days)
 Provide Fax Results

Requested Report Date

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg

Special Instructions/Comments: *Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other (Circle One)

Please call
With ANY QUESTIONS:
STEVE BARNETT
503-639-3400

 Sample Shipment contains US EPA regulated soil samples (check box if applicable)

Relinquished By:	Received By:	Relinquished By:	Received By:
 Signature SCOTT BAXTER Printed Name	 Signature STEVE BARNETT Printed Name	 Signature STEVE BARNETT Printed Name	 Signature BRIAN P. STOENIN Printed Name

PC CC

Cooler Receipt and Preservation Form

Client / Project: J H BaxterService Request K13 01272Received: 6H 2/12/13 Opened: 6H 2/12/13 By: 6H Unloaded: 2/13/13 By: B31. Samples were received via? Mail Fed Ex UPS DHL PDX Courier Hand Delivered2. Samples were received in: (circle) Cooler Box Envelope Other _____ NA3. Were custody seals on coolers? NA Y If yes, how many and where?If present, were custody seals intact? Y NIf present, were they signed and dated? Y N

Raw Temp	Corr. Temp	Raw Blank	Corr. Blank	Corr. Factor	Thermometer ID	Cooler/COC ID	Tracking Number	NA	Filed
4.7	4.5	—	—	- .2	309				
8.8	8.7	7.3	7.2	- .1	307287				
5.9	5.8	—	—	- .1	282				
6.9	7.1	9.1	9.3	+ .2	298				

7. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves _____8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N9. Did all bottles arrive in good condition (unbroken)? Indicate in the table below. NA Y N10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N11. Did all sample labels and tags agree with custody papers? Indicate major discrepancies in the table on page 2. NA Y N12. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N13. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N14. Were VOA vials received without headspace? Indicate in the table below. NA Y N15. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Pentachlorophenol

Organic Analysis: Pentachlorophenol

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.
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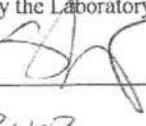
Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

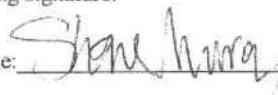
Service Request: K1301272

Cover Page - Organic Analysis Data Package
Pentachlorophenol

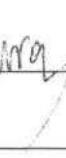
Sample Name	Lab Code	Date Collected	Date Received
BXS-1	K1301272-001	02/12/2013	02/13/2013
BXS-2	K1301272-002	02/12/2013	02/13/2013
BXS-5	K1301272-003	02/12/2013	02/13/2013

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Name: 

Date: 3/4/13

Title: 

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301272
 Date Collected: 02/12/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: BXS-1 Units: ug/L
 Lab Code: K1301272-001 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	56 D	2.5	0.80	5	02/15/13	02/26/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	95	33-114	02/26/13	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301272
 Date Collected: 02/12/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: BXS-2 Units: ug/L
 Lab Code: K1301272-002 Basis: NA

Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	02/26/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	92	33-114	02/26/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301272
 Date Collected: 02/12/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: BXS-5 Units: ug/L
 Lab Code: K1301272-003 Basis: NA

Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	60 D	5.0	1.6	10	02/15/13	02/26/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	96	33-114	02/26/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

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Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301272
 Date Collected: NA
 Date Received: NA

Pentachlorophenol

Sample Name: Method Blank Units: ug/L
 Lab Code: KWG1301660-4 Basis: NA

Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	74	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Report

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301272

Surrogate Recovery Summary
Pentachlorophenol

Extraction Method: Method
 Analysis Method: 8151M

Units: PERCENT
 Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
Batch QC	K1301266-001	91
BXS-1	K1301272-001	95 D
BXS-2	K1301272-002	92
BXS-5	K1301272-003	96 D
Method Blank	KWG1301660-4	74
Batch QCMS	KWG1301660-1	82
Batch QCDMS	KWG1301660-2	84
Lab Control Sample	KWG1301660-3	89

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 33-114

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301272
 Date Extracted: 02/15/2013
 Date Analyzed: 03/02/2013

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	Batch QC	Units:	ug/L
Lab Code:	K1301266-001	Basis:	NA
Extraction Method:	Method	Level:	Low
Analysis Method:	8151M	Extraction Lot:	KWG1301660

Analyte Name	Sample Result	Batch QCMS			Batch QCDMS			%Rec Limits	RPD	RPD Limit
		Result	Spike Amount	%Rec	Result	Spike Amount	%Rec			
Pentachlorophenol	820	826	10.0	105 #	846	10.0	308 #	40-106	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301272
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013

**Lab Control Spike Summary
Pentachlorophenol**

Extraction Method: Method
Analysis Method: 8151M

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1301660

Lab Control Sample
KWG1301660-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Pentachlorophenol	7.84	10.0	78	44-106

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301272
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013
Time Analyzed: 20:13

Method Blank Summary
Pentachlorophenol

Sample Name: Method Blank
Lab Code: KWG1301660-4

Instrument ID: GC16
File ID: J:\GC16\DATA\030113PA\0301F011.D

Extraction Method: Method
Analysis Method: 8151M

Level: Low
Extraction Lot: KWG1301660

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
BXS-1	K1301272-001	J:\GC16\DATA\022513P\0225F031.D	02/26/13	00:51
BXS-2	K1301272-002	J:\GC16\DATA\022513P\0225F032.D	02/26/13	01:11
BXS-5	K1301272-003	J:\GC16\DATA\022513P\0225F033.D	02/26/13	01:30
Lab Control Sample	KWG1301660-3	J:\GC16\DATA\030113PA\0301F010.D	03/01/13	19:53
Batch QC	K1301266-001	J:\GC16\DATA\030113PA\0301F088.D	03/02/13	22:57
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030113PA\0301F089.D	03/02/13	23:17
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030113PA\0301F090.D	03/02/13	23:36
Batch QC	K1301266-001	J:\GC16\DATA\030413P\0304F012.D	03/04/13	12:11
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030413P\0304F013.D	03/04/13	12:31
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030413P\0304F014.D	03/04/13	12:51

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301272
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013
Time Analyzed: 19:53

Lab Control Sample Summary
Pentachlorophenol

Sample Name: Lab Control Sample
Lab Code: KWG1301660-3

Instrument ID: GC16
File ID: J:\GC16\DATA\030113PA\0301F010.D

Extraction Method: Method
Analysis Method: 8151M

Level: Low
Extraction Lot: KWG1301660

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
BXS-1	K1301272-001	J:\GC16\DATA\022513P\0225F031.D	02/26/13	00:51
BXS-2	K1301272-002	J:\GC16\DATA\022513P\0225F032.D	02/26/13	01:11
BXS-5	K1301272-003	J:\GC16\DATA\022513P\0225F033.D	02/26/13	01:30
Method Blank	KWG1301660-4	J:\GC16\DATA\030113PA\0301F011.D	03/01/13	20:13
Batch QC	K1301266-001	J:\GC16\DATA\030113PA\0301F088.D	03/02/13	22:57
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030113PA\0301F089.D	03/02/13	23:17
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030113PA\0301F090.D	03/02/13	23:36
Batch QC	K1301266-001	J:\GC16\DATA\030413P\0304F012.D	03/04/13	12:11
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030413P\0304F013.D	03/04/13	12:31
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030413P\0304F014.D	03/04/13	12:51

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272
Calibration Date: 02/21/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12268
Instrument ID: GC16

Column: Rtx-1701

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\022113PA\0221F075.D	F	J:\GC16\DATA\022113PA\0221F081.D
B	J:\GC16\DATA\022113PA\0221F076.D	G	J:\GC16\DATA\022113PA\0221F082.D
C	J:\GC16\DATA\022113PA\0221F077.D	H	J:\GC16\DATA\022113PA\0221F083.D
D	J:\GC16\DATA\022113PA\0221F079.D	I	J:\GC16\DATA\022113PA\0221F084.D
E	J:\GC16\DATA\022113PA\0221F080.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	78100	B	2.4	78000	C	4.8	80600	D	24	79000	E	48	69600
	F	71	66700	G	95	65900	H	120	65100	I	140	65400			
4-Bromo-2,6-dichlorophenol	A	1.0	46900	B	2.5	42300	C	5.0	44700	D	25	49000	E	50	45500
	F	75	47300	G	100	45300	H	130	45300	I	150	44800			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Calibration Date: 02/21/2013**Initial Calibration Summary**
Pentachlorophenol**Calibration ID:** CAL12268
Instrument ID: GC16**Column:** Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	9.3		≤ 20
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	4.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

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QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Calibration Date: 02/21/2013
Date Analyzed: 02/21/2013**Second Source Calibration Verification**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration ID:** CAL12268
Units: ug/L**File ID:** J:\GC16\DATA\022113PA\0221F085.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	25	72000	75900	5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301272
 Calibration Date: 02/21/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12268
 Instrument ID: GC16

Column: Rtx-35

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\022113PA\0221F075.D\0221R075.D	F	J:\GC16\DATA\022113PA\0221F081.D\0221R081.D
B	J:\GC16\DATA\022113PA\0221F076.D\0221R076.D	G	J:\GC16\DATA\022113PA\0221F082.D\0221R082.D
C	J:\GC16\DATA\022113PA\0221F077.D\0221R077.D	H	J:\GC16\DATA\022113PA\0221F083.D\0221R083.D
D	J:\GC16\DATA\022113PA\0221F079.D\0221R079.D	I	J:\GC16\DATA\022113PA\0221F084.D\0221R084.D
E	J:\GC16\DATA\022113PA\0221F080.D\0221R080.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	73600	B	2.4	72200	C	4.8	75800	D	24	72400	E	48	62700
	F	71	63600	G	95	59800	H	120	59000	I	140	60100			
4-Bromo-2,6-dichlorophenol	A	1.0	42800	B	2.5	42600	C	5.0	45800	D	25	46600	E	50	41600
	F	75	42200	G	100	40100	H	130	39600	I	150	39000			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272
Calibration Date: 02/21/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12268
Instrument ID: GC16

Column: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	10.2		≤ 20
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	6.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Calibration Date: 02/21/2013
Date Analyzed: 02/21/2013**Second Source Calibration Verification**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration ID:** CAL12268
Units: ug/L**File ID:** J:\GC16\DATA\022113PA\0221F085.D\0221R085.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	24	66600	69600	4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301272
 Calibration Date: 03/01/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12284
 Instrument ID: GC16

Column: Rtx-1701

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\030113P\0301F003.D	F	J:\GC16\DATA\030113P\0301F008.D
B	J:\GC16\DATA\030113P\0301F004.D	G	J:\GC16\DATA\030113P\0301F009.D
C	J:\GC16\DATA\030113P\0301F005.D	H	J:\GC16\DATA\030113P\0301F010.D
D	J:\GC16\DATA\030113P\0301F006.D	I	J:\GC16\DATA\030113P\0301F011.D
E	J:\GC16\DATA\030113P\0301F007.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	89000	B	2.4	83000	C	4.8	85500	D	24	73100	E	48	62000
	F	71	64800	G	95	60600	H	120	60800	I	140	58100			
4-Bromo-2,6-dichlorophenol	A	1.0	44400	B	2.5	41600	C	5.0	47200	D	25	50800	E	50	45200
	F	75	48500	G	100	46100	H	130	46800	I	150	45000			

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Calibration Date: 03/01/2013**Initial Calibration Summary**
Pentachlorophenol**Calibration ID:** CAL12284
Instrument ID: GC16**Column:** Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Result	Q	Control Criteria
Pentachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	5.7		≤ 20

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Calibration Date: 03/01/2013
Date Analyzed: 03/01/2013**Second Source Calibration Verification**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration ID:** CAL12284
Units: ug/L**File ID:** J:\GC16\DATA\030113P\0301F012.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	26	70800	76100	NA	11	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272
Calibration Date: 03/01/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-35

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\030113P\0301F003.D\0301R003.D	F	J:\GC16\DATA\030113P\0301F008.D\0301R008.D
B	J:\GC16\DATA\030113P\0301F004.D\0301R004.D	G	J:\GC16\DATA\030113P\0301F009.D\0301R009.D
C	J:\GC16\DATA\030113P\0301F005.D\0301R005.D	H	J:\GC16\DATA\030113P\0301F010.D\0301R010.D
D	J:\GC16\DATA\030113P\0301F006.D\0301R006.D	I	J:\GC16\DATA\030113P\0301F011.D\0301R011.D
E	J:\GC16\DATA\030113P\0301F007.D\0301R007.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	76200	B	2.4	72000	C	4.8	75100	D	24	63400	E	48	53400
	F	71	55000	G	95	51100	H	120	50800	I	140	48500			
4-Bromo-2,6-dichlorophenol	A	1.0	41600	B	2.5	41000	C	5.0	44800	D	25	44100	E	50	38800
	F	75	41500	G	100	39100	H	130	39300	I	150	37800			

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272
Calibration Date: 03/01/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	5.9		≤ 20

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272
Calibration Date: 03/01/2013
Date Analyzed: 03/01/2013

**Second Source Calibration Verification
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12284
Units: ug/L

File ID: J:\GC16\DATA\030113P\0301F012.D\0301R012.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	27	60600	66000	NA	12	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 02/26/2013**Continuing Calibration Verification Summary
Pentachlorophenol****Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L
Column ID: Rtx-1701**File ID:** J:\GC16\DATA\022513P\0225F029.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	72000	68700	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	50	45700	45400	-1	NA	± 20 %	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 02/26/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L**File ID:** J:\GC16\DATA\022513P\0225F029.D\0225R029.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	66600	63000	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	50	42300	42200	0	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 02/26/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L**File ID:** J:\GC16\DATA\022513P\0225F042.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	72000	69300	-4	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	50	45700	46100	1	NA	± 20 %	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 02/26/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L**File ID:** J:\GC16\DATA\022513P\0225F042.D\0225R042.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	66600	63300	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	51	42300	42900	1	NA	± 20 %	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L
Column ID: Rtx-1701**File ID:** J:\GC16\DATA\030113PA\0301F017.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	64000	NA	-3	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	46900	2	NA	$\pm 20\%$	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L
Column ID: Rtx-35**File ID:** J:\GC16\DATA\030113PA\0301F017.D\0301R017.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	54600	NA	-4	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	$\pm 20\%$	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F030.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	63900	NA	-4	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	46900	2	NA	$\pm 20\%$	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F030.D\0301R030.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	55200	NA	-3	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40200	-2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/02/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L
Column ID: Rtx-1701**File ID:** J:\GC16\DATA\030113PA\0301F086.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	70800	65100	NA	-2	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	47500	3	NA	$\pm 20\%$	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272
Date Analyzed: 03/02/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F086.D\0301R086.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	55200	NA	-3	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/03/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L
Column ID: Rtx-1701**File ID:** J:\GC16\DATA\030113PA\0301F098.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	64600	NA	-2	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	47200	2	NA	$\pm 20\%$	AverageRF

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/03/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F098.D\0301R098.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	60600	55900	NA	-2	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40200	-2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F004.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	42	70800	59200	NA	-11	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	47	46200	43800	-5	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F004.D\0304R004.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	44	60600	53200	NA	-7	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	48	40900	39100	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary
Pentachlorophenol****Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F015.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	70800	65600	NA	-1	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	53	46200	48600	5	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F015.D\0304R015.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	48	60600	57000	NA	1	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	40900	41500	2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M**Analysis Lot:** KWG1301759**Instrument ID:** GC16**Column:** Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0225F003.D	Continuing Calibration Verification	KWG1301759-1	2/25/2013	12:42		2/25/2013	12:57
0225F004.D	Instrument Blank	KWG1301759-2	2/25/2013	13:02		2/25/2013	13:17
0225F005.D	ZZZZZZ	ZZZZZZ	2/25/2013	13:37		2/25/2013	13:52
0225F006.D	ZZZZZZ	ZZZZZZ	2/25/2013	13:57		2/25/2013	14:12
0225F007.D	ZZZZZZ	ZZZZZZ	2/25/2013	14:16		2/25/2013	14:31
0225F008.D	ZZZZZZ	ZZZZZZ	2/25/2013	14:36		2/25/2013	14:51
0225F009.D	Instrument Blank	KWG1301759-3	2/25/2013	17:19		2/25/2013	17:34
0225F010.D	ZZZZZZ	ZZZZZZ	2/25/2013	17:39		2/25/2013	17:54
0225F011.D	ZZZZZZ	ZZZZZZ	2/25/2013	17:59		2/25/2013	18:14
0225F012.D	ZZZZZZ	ZZZZZZ	2/25/2013	18:18		2/25/2013	18:33
0225F013.D	ZZZZZZ	ZZZZZZ	2/25/2013	18:38		2/25/2013	18:53
0225F015.D	Instrument Blank	KWG1301759-4	2/25/2013	19:17		2/25/2013	19:32
0225F016.D	Continuing Calibration Verification	KWG1301759-5	2/25/2013	19:37		2/25/2013	19:52
0225F017.D	Instrument Blank	KWG1301759-6	2/25/2013	19:56		2/25/2013	20:11
0225F019.D	ZZZZZZ	ZZZZZZ	2/25/2013	20:55		2/25/2013	21:10
0225F020.D	ZZZZZZ	ZZZZZZ	2/25/2013	21:15		2/25/2013	21:30
0225F023.D	ZZZZZZ	ZZZZZZ	2/25/2013	22:14		2/25/2013	22:29
0225F024.D	ZZZZZZ	ZZZZZZ	2/25/2013	22:33		2/25/2013	22:48
0225F028.D	Instrument Blank	KWG1301759-7	2/25/2013	23:52		2/26/2013	00:07
0225F029.D	Continuing Calibration Verification	KWG1301759-8	2/26/2013	00:12		2/26/2013	00:27
0225F030.D	Instrument Blank	KWG1301759-9	2/26/2013	00:31		2/26/2013	00:46
0225F031.D	BXS-1	K1301272-001	2/26/2013	00:51		2/26/2013	01:06
0225F032.D	BXS-2	K1301272-002	2/26/2013	01:11		2/26/2013	01:26
0225F033.D	BXS-5	K1301272-003	2/26/2013	01:30		2/26/2013	01:45
0225F034.D	ZZZZZZ	ZZZZZZ	2/26/2013	01:50		2/26/2013	02:05
0225F035.D	ZZZZZZ	ZZZZZZ	2/26/2013	02:10		2/26/2013	02:25
0225F036.D	ZZZZZZ	ZZZZZZ	2/26/2013	02:29		2/26/2013	02:44
0225F037.D	ZZZZZZ	ZZZZZZ	2/26/2013	02:49		2/26/2013	03:04
0225F038.D	ZZZZZZ	ZZZZZZ	2/26/2013	03:09		2/26/2013	03:24
0225F039.D	ZZZZZZ	ZZZZZZ	2/26/2013	03:28		2/26/2013	03:43
0225F040.D	ZZZZZZ	ZZZZZZ	2/26/2013	03:48		2/26/2013	04:03
0225F041.D	Instrument Blank	KWG1301759-10	2/26/2013	04:07		2/26/2013	04:22
0225F042.D	Continuing Calibration Verification	KWG1301759-11	2/26/2013	04:27		2/26/2013	04:42
0225F043.D	Instrument Blank	KWG1301759-12	2/26/2013	04:47		2/26/2013	05:02

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301889
Instrument ID: GC16
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F003.D	Continuing Calibration Verification	KWG1301889-1	3/1/2013	16:37		3/1/2013	16:52
0301F004.D	Instrument Blank	KWG1301889-2	3/1/2013	16:56		3/1/2013	17:11
0301F005.D	ZZZZZZ	ZZZZZZ	3/1/2013	17:16		3/1/2013	17:31
0301F006.D	ZZZZZZ	ZZZZZZ	3/1/2013	17:36		3/1/2013	17:51
0301F007.D	ZZZZZZ	ZZZZZZ	3/1/2013	17:55		3/1/2013	18:10
0301F008.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:15		3/1/2013	18:30
0301F009.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:34		3/1/2013	18:49
0301F015.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:54		3/1/2013	19:09
0301F017.D	Continuing Calibration Verification	KWG1301889-3	3/1/2013	19:14		3/1/2013	19:29
0301F018.D	Instrument Blank	KWG1301889-4	3/1/2013	19:33		3/1/2013	19:48
0301F010.D	Lab Control Sample	KWG1301660-3	3/1/2013	19:53		3/1/2013	20:08
0301F011.D	Method Blank	KWG1301660-4	3/1/2013	20:13		3/1/2013	20:28
0301F020.D	ZZZZZZ	ZZZZZZ	3/1/2013	20:32		3/1/2013	20:47
0301F021.D	ZZZZZZ	ZZZZZZ	3/1/2013	20:52		3/1/2013	21:07
0301F022.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:12		3/1/2013	21:27
0301F023.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:31		3/1/2013	21:46
0301F024.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:51		3/1/2013	22:06
0301F025.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:10		3/1/2013	22:25
0301F026.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:30		3/1/2013	22:45
0301F027.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:50		3/1/2013	23:05
0301F028.D	ZZZZZZ	ZZZZZZ	3/1/2013	23:09		3/1/2013	23:24
0301F029.D	Instrument Blank	KWG1301889-5	3/1/2013	23:29		3/1/2013	23:44
0301F030.D	Continuing Calibration Verification	KWG1301889-6	3/1/2013	23:49		3/2/2013	00:04
0301F031.D	Instrument Blank	KWG1301889-7	3/2/2013	00:08		3/2/2013	00:23
0301F032.D	ZZZZZZ	ZZZZZZ	3/2/2013	01:26		3/2/2013	01:41
0301F033.D	ZZZZZZ	ZZZZZZ	3/2/2013	01:46		3/2/2013	02:01
0301F034.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:05		3/2/2013	02:20
0301F035.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:25		3/2/2013	02:40
0301F036.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:44		3/2/2013	02:59
0301F037.D	Instrument Blank	KWG1301889-8	3/2/2013	03:04		3/2/2013	03:19
0301F038.D	Continuing Calibration Verification	KWG1301889-9	3/2/2013	03:24		3/2/2013	03:39
0301F039.D	Instrument Blank	KWG1301889-10	3/2/2013	03:43		3/2/2013	03:58
0301F040.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:03		3/2/2013	04:18
0301F041.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:22		3/2/2013	04:37

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301272

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301889
Instrument ID: GC16
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F042.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:42		3/2/2013	04:57
0301F043.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:01		3/2/2013	05:16
0301F044.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:21		3/2/2013	05:36
0301F045.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:40		3/2/2013	05:55
0301F046.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:00		3/2/2013	06:15
0301F047.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:20		3/2/2013	06:35
0301F048.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:39		3/2/2013	06:54
0301F049.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:59		3/2/2013	07:14
0301F050.D	Instrument Blank	KWG1301889-11	3/2/2013	07:18		3/2/2013	07:33
0301F051.D	Continuing Calibration Verification	KWG1301889-12	3/2/2013	07:38		3/2/2013	07:53
0301F052.D	Instrument Blank	KWG1301889-13	3/2/2013	07:58		3/2/2013	08:13
0301F053.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:17		3/2/2013	08:32
0301F054.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:37		3/2/2013	08:52
0301F055.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:56		3/2/2013	09:11
0301F056.D	ZZZZZZ	ZZZZZZ	3/2/2013	09:16		3/2/2013	09:31
0301F057.D	ZZZZZZ	ZZZZZZ	3/2/2013	09:36		3/2/2013	09:51
0301F058.D	Instrument Blank	KWG1301889-14	3/2/2013	09:55		3/2/2013	10:10
0301F059.D	Continuing Calibration Verification	KWG1301889-15	3/2/2013	10:15		3/2/2013	10:30
0301F060.D	Instrument Blank	KWG1301889-16	3/2/2013	10:34		3/2/2013	10:49
0301F061.D	ZZZZZZ	ZZZZZZ	3/2/2013	14:43		3/2/2013	14:58
0301F062.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:03		3/2/2013	15:18
0301F063.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:23		3/2/2013	15:38
0301F064.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:42		3/2/2013	15:57
0301F065.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:02		3/2/2013	16:17
0301F066.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:22		3/2/2013	16:37
0301F067.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:43		3/2/2013	16:58
0301F069.D	ZZZZZZ	ZZZZZZ	3/2/2013	17:22		3/2/2013	17:37
0301F071.D	Instrument Blank	KWG1301889-17	3/2/2013	17:42		3/2/2013	17:57
0301F072.D	Continuing Calibration Verification	KWG1301889-18	3/2/2013	18:01		3/2/2013	18:16
0301F073.D	Instrument Blank	KWG1301889-19	3/2/2013	18:21		3/2/2013	18:36
0301F086.D	Continuing Calibration Verification	KWG1301889-21	3/2/2013	22:18		3/2/2013	22:33
0301F087.D	Instrument Blank	KWG1301889-22	3/2/2013	22:38		3/2/2013	22:53
0301F088.D	Batch QC	K1301266-001	3/2/2013	22:57		3/2/2013	23:12
0301F089.D	Batch QCMS	KWG1301660-1	3/2/2013	23:17		3/2/2013	23:32

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301272

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301889
 Instrument ID: GC16
 Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F090.D	Batch QCDMS	KWG1301660-2	3/2/2013	23:36		3/2/2013	23:51
0301F095.D	ZZZZZZ	ZZZZZZ	3/3/2013	01:14		3/3/2013	01:29
0301F097.D	Instrument Blank	KWG1301889-23	3/3/2013	01:54		3/3/2013	02:09
0301F098.D	Continuing Calibration Verification	KWG1301889-24	3/3/2013	02:13		3/3/2013	02:28
0301F099.D	Instrument Blank	KWG1301889-25	3/3/2013	02:33		3/3/2013	02:48
0301F100.D	ZZZZZZ	ZZZZZZ	3/3/2013	02:52		3/3/2013	03:07
0301F102.D	ZZZZZZ	ZZZZZZ	3/3/2013	03:32		3/3/2013	03:47
0301F103.D	ZZZZZZ	ZZZZZZ	3/3/2013	03:51		3/3/2013	04:06
0301F104.D	ZZZZZZ	ZZZZZZ	3/3/2013	04:11		3/3/2013	04:26
0301F105.D	Instrument Blank	KWG1301889-26	3/3/2013	04:30		3/3/2013	04:45
0301F106.D	Continuing Calibration Verification	KWG1301889-27	3/3/2013	04:50		3/3/2013	05:05
0301F107.D	Instrument Blank	KWG1301889-28	3/3/2013	05:09		3/3/2013	05:24

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301272**Analysis Run Log**
Pentachlorophenol**Analysis Method:** 8151M**Analysis Lot:** KWG1301919**Instrument ID:** GC16**Column:** Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0304F004.D	Continuing Calibration Verification	KWG1301919-1	3/4/2013	09:34		3/4/2013	09:49
0304F005.D	Instrument Blank	KWG1301919-2	3/4/2013	09:54		3/4/2013	10:09
0304F006.D	ZZZZZZ	ZZZZZZ	3/4/2013	10:14		3/4/2013	10:29
0304F008.D	ZZZZZZ	ZZZZZZ	3/4/2013	10:53		3/4/2013	11:08
0304F010.D	ZZZZZZ	ZZZZZZ	3/4/2013	11:32		3/4/2013	11:47
0304F012.D	Batch QC	K1301266-001	3/4/2013	12:11		3/4/2013	12:26
0304F013.D	Batch QCMS	KWG1301660-1	3/4/2013	12:31		3/4/2013	12:46
0304F014.D	Batch QCDMS	KWG1301660-2	3/4/2013	12:51		3/4/2013	13:06
0304F015.D	Continuing Calibration Verification	KWG1301919-3	3/4/2013	13:10		3/4/2013	13:25
0304F016.D	Instrument Blank	KWG1301919-4	3/4/2013	13:30		3/4/2013	13:45

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301272
Date Extracted: 02/15/2013

Extraction Prep Log
Pentachlorophenol

Extraction Method: Method
Analysis Method: 8151M

Extraction Lot: KWG1301660
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
BXS-1	K1301272-001	02/12/13	02/13/13	5mL	1mL	NA	
BXS-2	K1301272-002	02/12/13	02/13/13	5mL	1mL	NA	
BXS-5	K1301272-003	02/12/13	02/13/13	5mL	1mL	NA	
Method Blank	KWG1301660-4	NA	NA	5mL	1mL	NA	
Batch QC	K1301266-001	NA	NA	5mL	1mL	NA	
Batch QCDL	K1301266-001	NA	NA	5mL	1mL	NA	
Batch QCMS	KWG1301660-1	NA	NA	5mL	1mL	NA	
Batch QCDMS	KWG1301660-2	NA	NA	5mL	1mL	NA	
Lab Control Sample	KWG1301660-3	NA	NA	5mL	1mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301272
Date Collected: 02/12/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: BXS-1 **Units:** ug/L
Lab Code: K1301272-001 **Basis:** NA
Extraction Method: Method **Level:** Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	2.5	0.80	56	57	1.8	D	5	02/26/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301272
Date Collected: 02/12/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: BXS-5 Units: ug/L
Lab Code: K1301272-003 Basis: NA
Extraction Method: Method Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	60	60	0.0	D	10	02/26/13



March 5, 2013

Analytical Report for Service Request No: K1301274

Scott Thielke
JH Baxter & Company
85 N. Baxter Road
P.O. Box 10797
Eugene, OR 97440

RE: J.H. Baxter/Arlington

Dear Scott:

Enclosed are the results of the samples submitted to our laboratory on February 13, 2013. For your reference, these analyses have been assigned our service request number K1301274.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3275. You may also contact me via Email at Chris.Leaf@alsglobal.com.

Respectfully submitted,

Columbia Analytical Services, Inc. dba ALS Environmental


Chris Leaf
Project Manager

CL/mj

Page 1 of 1339



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RIGHT SOLUTIONS RIGHT PARTNER

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
 - i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
DOD-QSM 4.2 definition : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
 - i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
 - The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Louisiana DHH	Not available	LA110003
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
New Mexico ED	http://www.nmenv.state.nm.us/dwb/Index.htm	-
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	1704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.caslab.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/analyte is offered by that state.

Case Narrative

ALS ENVIRONMENTAL

Client:	JH Baxter & Company	Service Request No.:	K1301274
Project:	J.H. Baxter/ Arlington	Date Received:	02/13/13
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Thirty-two water samples were received for analysis at ALS Environmental on 02/13/13. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Pentachlorophenol by EPA Method 8151

Matrix Spike Recovery Exceptions:

The control criteria for matrix spike recovery of Pentachlorophenol for the associated Matrix Spikes were not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

Elevated Detection Limits:

Several field samples and the associated Matrix Spikes required dilution due to the presence of elevated levels of target analyte. The reporting limits were adjusted to reflect the dilution.

No other anomalies associated with the analysis of these samples were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270

Calibration Verification Exceptions:

The following analytes were flagged as outside the upper control criterion for Continuing Calibration Verification (CCV) MS11\1227F003.D: Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene. In accordance with the EPA Method 8270D, 80% or more of the CCV analytes must have passed within 20% of the true value. The remaining analytes are allowed a 40% difference as per the ALS SOP. The CCV met these criteria. The data quality was not affected. No further corrective action was required.

Sample Notes and Discussion:

Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed and reported in lieu of the MS/MSD for these samples.

No other anomalies associated with the analysis of these samples were observed.

Approved by



Chain of Custody

29637

CHAIN OF CUSTODY

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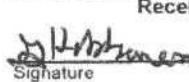
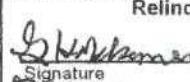
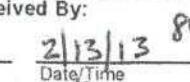
SR# K13U.

COC Set _____ of _____

Page 1 OF 1 COC# _____

Project Name		JH BAXTER/Arlington		
Project Number				
Project Manager				
Company Name		J.H. BAXTER		
Company Address		85. N. BAXTER RD.		
City/State/Zip		Eugene, OR, 97402		
E-Mail Address				
Phone #		FAX #		
Sampler Signature				
Sample ID	Date	Time	Lab ID	Matrix
1 HCMW-7	2-11	1010	H ₂ O	1 X
2 MW-15	2-11	1127		2 XX
3 MW-16	2-10	1525		2 XX
4 MW-17	2-10	1655		2 XX
5 MW-18	2-11	0808		2 XX
6 MW-2	2-11	1022		2 XX
7 MW-22	2-11	1213		1 X
8 MW-23	2-11	1241		1 X
9 MW-24	2-11	1400		1 X
10 MW-25	2-11	1338		1 X
11 MW-26	2-11	1428		1 X

Number of Containers	8151A Modified / PCP Only	8227D / PAH SIM	Remarks	
1	X			
2	XX			
3	XX			
4	XX			
5	XX			
6	XX			
7	XX			
8	X			
9	X			
10	X			
11	X			

Report Requirements		Invoice Information			
<input type="checkbox"/> I. Routine Report Method <input type="checkbox"/> Blank Surrogate as required		P.O.# Bill To: JH BAXTER		<small>Circle which metals are to be analyzed</small> Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg	
<input type="checkbox"/> II. Report Dup., MS, MSD as required				Special Instructions/Comments: *Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other (Circle One)	
<input type="checkbox"/> III. Data Validation Report (includes all raw data)				Please CALL: STEVE BARNETT w/ ANY QUESTIONS 503-639-3400	
<input checked="" type="checkbox"/> IV. CLP Deliverable Report		Turnaround Requirements <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input checked="" type="checkbox"/> 5 Day <input type="checkbox"/> Standard (10-15 working days) <input type="checkbox"/> Provide Fax Results		<input type="checkbox"/> Sample Shipment contains USDA regulated soil samples (check box if applicable)	
<input type="checkbox"/> V. EDD		Requested Report Date			
Relinquished By:  Signature: SCOTT WIEKE Printed Name: SCOTT WIEKE		Received By:  Signature: JH BAXTER Printed Name: JH BAXTER		Relinquished By:  Signature: BRIAN Printed Name: BRIAN	
Date/Time: 2/12/13 1455 Firm: JH BAXTER		Date/Time: 2/12/13 1455 Firm: ALS		Date/Time: 2/12/13 1730 Firm: ALS	
				Received By:  Signature: BRIAN Printed Name: BRIAN	
				Date/Time: 2/13/13 800 Firm: ALS	



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CHAIN OF CUSTODY

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SR# K1301274

COC Set _____ of _____
Page 1 OF 1 COC# _____

Project Name JH BAXTER/ARLINGTON

Project Number

Project Manager

Company Name J.H. BAXTER

Company Address 35 N. BAXTER RD
EUGENE OR 97402

City/State/Zip

E-Mail Address

Phone # FAX 3

Sampler Signature

Sample ID Date Time Lab ID Matrix

Sample ID	Date	Time	Lab ID	Matrix	Number of Containers	8551A Modified / PCP C-104	8270D / PAH SIM	Remarks
						1 X	1 X	
MW-27	2-11	1458	H2O		1			
MW-28	2-11	1557			1	X		
MW-29	2-11	1154			1	X		
MW-30	2-10	1733			2	X	X	
MW-31	2-11	1701			1	X		
MW-32	2-11	1311			1	X		
MW-33	2-11	1530			1	X		
MW-34	2-11	1130			1	X		
MW-35	2-11	1531			2	X		
MW-36	2-10	1423			2	X	X	
MW-37	2-10	1610			2	X	X	

Report Requirements

- I Routine Report Method
- Blank Surrogate as required
- II Report Dup. MS MSD as required
- III Data Validation Report (includes all raw data)
- IV CLP Deliverable Report
- V EDD

Invoice Information

P.O.#

Bill To: JH BAXTER

Circle which metals are to be analyzed

Total Metals Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Ni K Ag Na Se Sr Ti Sn V Zn Hg

Dissolved Metals Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Na K Ag Na Se Sr Ti Sn V Zn Hg

Special Instructions/Comments: *Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other (Circle One)

QUESTIONS Please Call: STEVE BARNETT

503-639-3700

 Sample Shipment contains USDA regulated soil samples (check box if applicable)

Relinquished By:	Received By:	Relinquished By:	Received By:
 Scott Thackeray Printed Name	 H. Hobkemann Printed Name	 Steve Barnett Printed Name	 Brian Johnson Printed Name



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CHAIN OF CUSTODY

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SR# K1301274

COC Set _____ of _____

Page 1 OF 1 COC# _____

10

Project Name	Project Number	Project Manager	Company Name	Company Address	City/State/Zip	E-Mail Address	Phone #	FAX #	Sample ID	Date	Time	Lab ID	Matrix	Number of Containers	7D	8151A Modified / 8270D / PAH SIM	Remarks	
															7D	8151A Modified / 8270D / PAH SIM	Remarks	
JH BAXTER/ARLINGTON			J.H. BAXTER	85 N. BAXTER RD	EUGENE OR 97402				MW-38	2-11	1100		H ₂ O	1	X			
									MW-39	2-10	1528			1	X			
									MW-40	2-10	1623			1	X			
									MW-41	2-10	1435			1	X			
									MW-42	2-11	0824			1	X			
									MW-43	2-11	926			1	X			
									MW-44	2-11	1404			1	X			
									Field Blk 44	2-12	1210			2	X X			
									MW-3	2-11	1403			2	X X	No Phos Cond. ON field blank		

Report Requirements		Invoice Information		Circle which metals are to be analyzed												
<input type="checkbox"/> I Routine Report Method Blank Surrogate as required		P.O. # JH BAXTER <hr/> <hr/>		Total Metals Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Si Ti Sn V Zn Hg Dissolved Metals Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Si Ti Sn V Zn Hg												
<input type="checkbox"/> II Report Dup MS MSD as required				Special Instructions/Comments: *Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other (Circle One)												
<input type="checkbox"/> III Data Validation Report (includes all raw data)																
<input checked="" type="checkbox"/> IV CLP Deliverable Report				QUESTIONS Please call: STEVE BARNETT 503-639-3700												
<input type="checkbox"/> V EDD				Sample Shipment contains USPA regulated soil samples (check box if applicable)												
Relinquished By: Signature: Steve Barnett Date/Time: 2-13-12 14:55 Printed Name: Steve Barnett Firm: JH Baxter				Received By: Signature: John Halkkanen Date/Time: 2-12-13 14:55 Printed Name: John Halkkanen Firm: ALS				Relinquished By: Signature: Brian Bergin Date/Time: 2-12-13 17:30 Printed Name: Brian Bergin Firm: ALS				Received By: Signature: Brian Bergin Date/Time: 2-13-13 8:00 Printed Name: Brian Bergin Firm: ALS				

PC *CV*

Cooler Receipt and Preservation Form

Client / Project: JH Baxter Service Request K13 01274
 Received: GH 2/12/13 Opened: 6+ 2/12/13 By: GH Unloaded: 2/13/13 By: B+

1. Samples were received via? Mail FedEx UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where?

If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Temp	Corr. Temp	Raw Blank	Corr. Blank	Corr. Factor	Thermometer ID	Cooler/COC ID	Tracking Number	NA	Filed
4.7	4.5	—	—	-1.2	309				
8.8	8.7	7.3	7.2	-1	307287				
5.9	5.8	—	—	-1	282				
6.9	7.1	9.1	9.3	+1.2	298				

7. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. Did all bottles arrive in good condition (unbroken)? Indicate in the table below. NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? Indicate major discrepancies in the table on page 2. NA Y N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
13. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
14. Were VOA vials received without headspace? Indicate in the table below. NA Y N
15. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:
<i>B</i>		

Sample ID	Bottle Count Bottle Type	Out of Temp	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: *Rec'd 2 PCP's Trip Blanks - rebalance -*

Pentachlorophenol

Organic Analysis: Pentachlorophenol

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274

Cover Page - Organic Analysis Data Package
Pentachlorophenol

Sample Name	Lab Code	Date Collected	Date Received
HCMW-7	K1301274-001	02/11/2013	02/13/2013
MW-15	K1301274-002	02/11/2013	02/13/2013
MW-16	K1301274-003	02/10/2013	02/13/2013
MW-17	K1301274-004	02/10/2013	02/13/2013
MW-18	K1301274-005	02/11/2013	02/13/2013
MW-2	K1301274-006	02/11/2013	02/13/2013
MW-22	K1301274-007	02/11/2013	02/13/2013
MW-23	K1301274-008	02/11/2013	02/13/2013
MW-24	K1301274-009	02/11/2013	02/13/2013
MW-25	K1301274-010	02/11/2013	02/13/2013
MW-26	K1301274-011	02/11/2013	02/13/2013
MW-27	K1301274-012	02/11/2013	02/13/2013
MW-28	K1301274-013	02/11/2013	02/13/2013
MW-29	K1301274-014	02/11/2013	02/13/2013
MW-30	K1301274-015	02/10/2013	02/13/2013
MW-31	K1301274-016	02/11/2013	02/13/2013
MW-32	K1301274-017	02/11/2013	02/13/2013
MW-33	K1301274-018	02/11/2013	02/13/2013
MW-34	K1301274-019	02/11/2013	02/13/2013
MW-35	K1301274-020	02/11/2013	02/13/2013
MW-36	K1301274-021	02/10/2013	02/13/2013
MW-37	K1301274-022	02/10/2013	02/13/2013
MW-38	K1301274-023	02/11/2013	02/13/2013
MW-39	K1301274-024	02/10/2013	02/13/2013
MW-40	K1301274-025	02/10/2013	02/13/2013
MW-41	K1301274-026	02/10/2013	02/13/2013
MW-42	K1301274-027	02/11/2013	02/13/2013
MW-43	K1301274-028	02/11/2013	02/13/2013
MW-44	K1301274-029	02/11/2013	02/13/2013
Field Blank Rinsate	K1301274-030	02/12/2013	02/13/2013
MW-3	K1301274-031	02/11/2013	02/13/2013
MW-23MS	KWG1301456-1	02/11/2013	02/13/2013
MW-23DMS	KWG1301456-2	02/11/2013	02/13/2013

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Name:

Date:

3/4/13

Title:

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: HCMW-7 Units: ug/L
 Lab Code: K1301274-001 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	94	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-15 **Units:** ug/L
Lab Code: K1301274-002 **Basis:** NA
Extraction Method: METHOD **Level:** Low
Analysis Method: 8151M

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND	U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	93	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-16 Units: ug/L
 Lab Code: K1301274-003 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	91	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-17 Units: ug/L
 Lab Code: K1301274-004 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	89	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-18 Units: ug/L
 Lab Code: K1301274-005 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	94	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-2 Units: ug/L
 Lab Code: K1301274-006 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	92	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-22 Units: ug/L
 Lab Code: K1301274-007 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	180	D	5.0	1.6	10	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	99	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-23 Units: ug/L
 Lab Code: K1301274-008 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	420 D	10	3.2	20	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	88	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-24 Units: ug/L
 Lab Code: K1301274-009 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	230 D	5.0	1.6	10	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	89	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-25 Units: ug/L
 Lab Code: K1301274-010 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	1700 D	50	16	100	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	96	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-26 Units: ug/L
 Lab Code: K1301274-011 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	0.19 J	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	93	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-27 Units: ug/L
 Lab Code: K1301274-012 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	91	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-28 Units: ug/L
 Lab Code: K1301274-013 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	64 D	1.5	0.48	3	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	92	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-29 Units: ug/L
 Lab Code: K1301274-014 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	16	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	69	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-30 Units: ug/L
 Lab Code: K1301274-015 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	79	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-31 Units: ug/L
 Lab Code: K1301274-016 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	82	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-32 Units: ug/L
 Lab Code: K1301274-017 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	83 D	2.5	0.80	5	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	96	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-33 Units: ug/L
 Lab Code: K1301274-018 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	90	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-34 Units: ug/L
 Lab Code: K1301274-019 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	590 D	25	8.0	50	02/14/13	02/19/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	92	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-35 Units: ug/L
 Lab Code: K1301274-020 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	89	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

New part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-36 Units: ug/L
 Lab Code: K1301274-021 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	260 D	5.0	1.6	10	02/15/13	02/26/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	33-114	02/26/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-37 Units: ug/L
 Lab Code: K1301274-022 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	03/02/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	80	33-114	03/02/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-38 Units: ug/L
 Lab Code: K1301274-023 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	0.39 J	0.50	0.16	1	02/15/13	02/26/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	80	33-114	02/26/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-39 Units: ug/L
 Lab Code: K1301274-024 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	93 D	5.0	1.6	10	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	82	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-40 Units: ug/L
 Lab Code: K1301274-025 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	180 D	5.0	1.6	10	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	75	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-41 Units: ug/L
 Lab Code: K1301274-026 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	49 D	5.0	1.6	10	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	76	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-42 Units: ug/L
 Lab Code: K1301274-027 Basis: NA

Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	44	D	2.5	0.80	5	02/15/13	03/02/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	80	33-114	03/02/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-43 Units: ug/L
 Lab Code: K1301274-028 Basis: NA

Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	83	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-44 Units: ug/L
 Lab Code: K1301274-029 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	280 D	5.0	1.6	10	02/15/13	03/02/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	85	33-114	03/02/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/12/2013
Date Received: 02/13/2013

Pentachlorophenol

Sample Name: Field Blank Rinsate **Units:** ug/L
Lab Code: K1301274-030 **Basis:** NA
Extraction Method: Method **Level:** Low
Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	77	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013

Pentachlorophenol

Sample Name: MW-3
Lab Code: K1301274-031

Units: ug/L
Basis: NA

Extraction Method: Method
Analysis Method: 8151M

Level: Low

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	110 D	2.5	0.80	5	02/15/13	03/02/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	75	33-114	03/02/13	Acceptable

Comments: _____

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: NA
 Date Received: NA

Pentachlorophenol

Sample Name: Method Blank Units: ug/L
 Lab Code: KWG1301456-4 Basis: NA

Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/14/13	02/18/13	KWG1301456	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	94	33-114	02/18/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Analytical Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: NA
 Date Received: NA

Pentachlorophenol

Sample Name: Method Blank Units: ug/L
 Lab Code: KWG1301660-4 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	Result Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Pentachlorophenol	ND U	0.50	0.16	1	02/15/13	03/01/13	KWG1301660	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromo-2,6-dichlorophenol	74	33-114	03/01/13	Acceptable

Comments: _____

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274

Surrogate Recovery Summary
Pentachlorophenol

Extraction Method: Method
 Analysis Method: 8151M

Units: PERCENT
 Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
Batch QC	K1301266-001	91
HCMW-7	K1301274-001	94
MW-15	K1301274-002	93
MW-16	K1301274-003	91
MW-17	K1301274-004	89
MW-18	K1301274-005	94
MW-2	K1301274-006	92
MW-22	K1301274-007	99
MW-23	K1301274-008	88
MW-24	K1301274-009	89
MW-25	K1301274-010	96
MW-26	K1301274-011	93
MW-27	K1301274-012	91
MW-28	K1301274-013	92
MW-29	K1301274-014	69
MW-30	K1301274-015	79
MW-31	K1301274-016	82
MW-32	K1301274-017	96
MW-33	K1301274-018	90
MW-34	K1301274-019	92
MW-35	K1301274-020	89
MW-36	K1301274-021	77 D
MW-37	K1301274-022	80
MW-38	K1301274-023	80
MW-39	K1301274-024	82 D
MW-40	K1301274-025	75 D
MW-41	K1301274-026	76 D
MW-42	K1301274-027	80 D
MW-43	K1301274-028	83
MW-44	K1301274-029	85 D
Field Blank Rinsate	K1301274-030	77
MW-3	K1301274-031	75 D
Method Blank	KWG1301456-4	94
Method Blank	KWG1301660-4	74

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol

33-114

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274

**Surrogate Recovery Summary
Pentachlorophenol**

Extraction Method: METHOD
Analysis Method: 8151M

Units: PERCENT
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>
MW-23MS	KWG1301456-1	86
MW-23DMS	KWG1301456-2	94
Batch QCMS	KWG1301660-1	82
Batch QCDMS	KWG1301660-2	84
Lab Control Sample	KWG1301456-3	100
Lab Control Sample	KWG1301660-3	89

Surrogate Recovery Control Limits (%)

Sur1 = 4-Bromo-2,6-dichlorophenol 33-114

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Extracted: 02/14/2013
 Date Analyzed: 02/19/2013

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	MW-23	Units:	ug/L
Lab Code:	K1301274-008	Basis:	NA
Extraction Method:	METHOD	Level:	Low
Analysis Method:	8151M	Extraction Lot:	KWG1301456

Analyte Name	Sample Result	MW-23MS KWG1301456-1 Matrix Spike			MW-23DMS KWG1301456-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Spike Amount	%Rec	Result	Spike Amount	%Rec			
Pentachlorophenol	420	416	10.0	-64 #	433	10.0	108 #	40-106	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Extracted: 02/15/2013
 Date Analyzed: 03/02/2013

Matrix Spike/Duplicate Matrix Spike Summary
Pentachlorophenol

Sample Name:	Batch QC	Units:	ug/L
Lab Code:	K1301266-001	Basis:	NA
Extraction Method:	Method	Level:	Low
Analysis Method:	8151M	Extraction Lot:	KWG1301660

Analyte Name	Batch QCMS KWG1301660-1 Matrix Spike				Batch QCDMS KWG1301660-2 Duplicate Matrix Spike				%Rec Limits	RPD	RPD Limit
	Sample Result	Result	Spike Amount	%Rec	Result	Spike Amount	%Rec				
Pentachlorophenol	820	826	10.0	105 #	846	10.0	308 #	40-106	2		30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/14/2013
Date Analyzed: 02/18/2013

**Lab Control Spike Summary
Pentachlorophenol**

Extraction Method: METHOD
Analysis Method: 8151M

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1301456

Lab Control Sample
KWG1301456-3
Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Pentachlorophenol	8.06	10.0	81	44-106

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013

**Lab Control Spike Summary
Pentachlorophenol**

Extraction Method: Method
Analysis Method: 8151M

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1301660

Lab Control Sample

KWG1301660-3

Lab Control Spike

Analyte Name	Result	Spike Amount	%Rec	%Rec Limits
Pentachlorophenol	7.84	10.0	78	44-106

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/14/2013
Date Analyzed: 02/18/2013
Time Analyzed: 19:17

Method Blank Summary
Pentachlorophenol

Sample Name: Method Blank
Lab Code: KWG1301456-4

Instrument ID: GC16
File ID: J:\GC16\DATA\021813P\0218F032.D

Extraction Method: METHOD
Analysis Method: 8151M

Level: Low
Extraction Lot: KWG1301456

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
HCMW-7	K1301274-001	J:\GC16\DATA\021813P\0218F005.D	02/18/13	10:27
MW-15	K1301274-002	J:\GC16\DATA\021813P\0218F006.D	02/18/13	10:46
MW-16	K1301274-003	J:\GC16\DATA\021813P\0218F007.D	02/18/13	11:06
MW-17	K1301274-004	J:\GC16\DATA\021813P\0218F008.D	02/18/13	11:26
MW-18	K1301274-005	J:\GC16\DATA\021813P\0218F009.D	02/18/13	11:45
MW-2	K1301274-006	J:\GC16\DATA\021813P\0218F010.D	02/18/13	12:05
MW-22	K1301274-007	J:\GC16\DATA\021813P\0218F011.D	02/18/13	12:25
MW-23	K1301274-008	J:\GC16\DATA\021813P\0218F012.D	02/18/13	12:44
MW-23MS	KWG1301456-1	J:\GC16\DATA\021813P\0218F013.D	02/18/13	13:04
MW-23DMS	KWG1301456-2	J:\GC16\DATA\021813P\0218F014.D	02/18/13	13:23
MW-24	K1301274-009	J:\GC16\DATA\021813P\0218F017.D	02/18/13	14:22
MW-25	K1301274-010	J:\GC16\DATA\021813P\0218F018.D	02/18/13	14:42
MW-26	K1301274-011	J:\GC16\DATA\021813P\0218F019.D	02/18/13	15:02
MW-27	K1301274-012	J:\GC16\DATA\021813P\0218F020.D	02/18/13	15:21
MW-28	K1301274-013	J:\GC16\DATA\021813P\0218F021.D	02/18/13	15:41
MW-29	K1301274-014	J:\GC16\DATA\021813P\0218F022.D	02/18/13	16:01
MW-30	K1301274-015	J:\GC16\DATA\021813P\0218F023.D	02/18/13	16:20
MW-31	K1301274-016	J:\GC16\DATA\021813P\0218F024.D	02/18/13	16:40
MW-32	K1301274-017	J:\GC16\DATA\021813P\0218F025.D	02/18/13	16:59
MW-33	K1301274-018	J:\GC16\DATA\021813P\0218F026.D	02/18/13	17:19
MW-34	K1301274-019	J:\GC16\DATA\021813P\0218F029.D	02/18/13	18:18
MW-35	K1301274-020	J:\GC16\DATA\021813P\0218F030.D	02/18/13	18:38
Lab Control Sample	KWG1301456-3	J:\GC16\DATA\021813P\0218F031.D	02/18/13	18:58
MW-22	K1301274-007	J:\GC16\DATA\021913P\0219F005.D	02/19/13	10:47
MW-23	K1301274-008	J:\GC16\DATA\021913P\0219F006.D	02/19/13	12:26
MW-23MS	KWG1301456-1	J:\GC16\DATA\021913P\0219F007.D	02/19/13	12:45
MW-23DMS	KWG1301456-2	J:\GC16\DATA\021913P\0219F008.D	02/19/13	13:05
MW-24	K1301274-009	J:\GC16\DATA\021913P\0219F009.D	02/19/13	13:25
MW-28	K1301274-013	J:\GC16\DATA\021913P\0219F011.D	02/19/13	14:04
MW-32	K1301274-017	J:\GC16\DATA\021913P\0219F018.D	02/19/13	16:22
MW-25	K1301274-010	J:\GC16\DATA\021913P\0219F019.D	02/19/13	16:42
MW-34	K1301274-019	J:\GC16\DATA\021913P\0219F020.D	02/19/13	17:01

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013
Time Analyzed: 20:13

Method Blank Summary
Pentachlorophenol

Sample Name: Method Blank
Lab Code: KWG1301660-4

Extraction Method: Method
Analysis Method: 8151M

Instrument ID: GC16
File ID: J:\GC16\DATA\030113PA\0301F011.D
Level: Low
Extraction Lot: KWG1301660

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-36	K1301274-021	J:\GC16\DATA\022513P\0225F038.D	02/26/13	03:09
MW-38	K1301274-023	J:\GC16\DATA\022513P\0225F040.D	02/26/13	03:48
MW-39	K1301274-024	J:\GC16\DATA\030113PA\0301F005.D	03/01/13	17:16
MW-40	K1301274-025	J:\GC16\DATA\030113PA\0301F006.D	03/01/13	17:36
MW-41	K1301274-026	J:\GC16\DATA\030113PA\0301F007.D	03/01/13	17:55
MW-43	K1301274-028	J:\GC16\DATA\030113PA\0301F008.D	03/01/13	18:15
Field Blank Rinsate	K1301274-030	J:\GC16\DATA\030113PA\0301F009.D	03/01/13	18:34
Lab Control Sample	KWG1301660-3	J:\GC16\DATA\030113PA\0301F010.D	03/01/13	19:53
MW-42	K1301274-027	J:\GC16\DATA\030113PA\0301F032.D	03/02/13	01:26
MW-44	K1301274-029	J:\GC16\DATA\030113PA\0301F033.D	03/02/13	01:46
MW-3	K1301274-031	J:\GC16\DATA\030113PA\0301F034.D	03/02/13	02:05
MW-37	K1301274-022	J:\GC16\DATA\030113PA\0301F036.D	03/02/13	02:44
Batch QC	K1301266-001	J:\GC16\DATA\030113PA\0301F088.D	03/02/13	22:57
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030113PA\0301F089.D	03/02/13	23:17
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030113PA\0301F090.D	03/02/13	23:36
Batch QC	K1301266-001	J:\GC16\DATA\030413P\0304F012.D	03/04/13	12:11
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030413P\0304F013.D	03/04/13	12:31
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030413P\0304F014.D	03/04/13	12:51

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/14/2013
Date Analyzed: 02/18/2013
Time Analyzed: 18:58

Lab Control Sample Summary
Pentachlorophenol

Sample Name: Lab Control Sample
Lab Code: KWG1301456-3

Instrument ID: GC16
File ID: J:\GC16\DATA\021813P\0218F031.D

Extraction Method: METHOD
Analysis Method: 8151M

Level: Low
Extraction Lot: KWG1301456

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
HCMW-7	K1301274-001	J:\GC16\DATA\021813P\0218F005.D	02/18/13	10:27
MW-15	K1301274-002	J:\GC16\DATA\021813P\0218F006.D	02/18/13	10:46
MW-16	K1301274-003	J:\GC16\DATA\021813P\0218F007.D	02/18/13	11:06
MW-17	K1301274-004	J:\GC16\DATA\021813P\0218F008.D	02/18/13	11:26
MW-18	K1301274-005	J:\GC16\DATA\021813P\0218F009.D	02/18/13	11:45
MW-2	K1301274-006	J:\GC16\DATA\021813P\0218F010.D	02/18/13	12:05
MW-22	K1301274-007	J:\GC16\DATA\021813P\0218F011.D	02/18/13	12:25
MW-23	K1301274-008	J:\GC16\DATA\021813P\0218F012.D	02/18/13	12:44
MW-23MS	KWG1301456-1	J:\GC16\DATA\021813P\0218F013.D	02/18/13	13:04
MW-23DMS	KWG1301456-2	J:\GC16\DATA\021813P\0218F014.D	02/18/13	13:23
MW-24	K1301274-009	J:\GC16\DATA\021813P\0218F017.D	02/18/13	14:22
MW-25	K1301274-010	J:\GC16\DATA\021813P\0218F018.D	02/18/13	14:42
MW-26	K1301274-011	J:\GC16\DATA\021813P\0218F019.D	02/18/13	15:02
MW-27	K1301274-012	J:\GC16\DATA\021813P\0218F020.D	02/18/13	15:21
MW-28	K1301274-013	J:\GC16\DATA\021813P\0218F021.D	02/18/13	15:41
MW-29	K1301274-014	J:\GC16\DATA\021813P\0218F022.D	02/18/13	16:01
MW-30	K1301274-015	J:\GC16\DATA\021813P\0218F023.D	02/18/13	16:20
MW-31	K1301274-016	J:\GC16\DATA\021813P\0218F024.D	02/18/13	16:40
MW-32	K1301274-017	J:\GC16\DATA\021813P\0218F025.D	02/18/13	16:59
MW-33	K1301274-018	J:\GC16\DATA\021813P\0218F026.D	02/18/13	17:19
MW-34	K1301274-019	J:\GC16\DATA\021813P\0218F029.D	02/18/13	18:18
MW-35	K1301274-020	J:\GC16\DATA\021813P\0218F030.D	02/18/13	18:38
Method Blank	KWG1301456-4	J:\GC16\DATA\021813P\0218F032.D	02/18/13	19:17
MW-22	K1301274-007	J:\GC16\DATA\021913P\0219F005.D	02/19/13	10:47
MW-23	K1301274-008	J:\GC16\DATA\021913P\0219F006.D	02/19/13	12:26
MW-23MS	KWG1301456-1	J:\GC16\DATA\021913P\0219F007.D	02/19/13	12:45
MW-23DMS	KWG1301456-2	J:\GC16\DATA\021913P\0219F008.D	02/19/13	13:05
MW-24	K1301274-009	J:\GC16\DATA\021913P\0219F009.D	02/19/13	13:25
MW-28	K1301274-013	J:\GC16\DATA\021913P\0219F011.D	02/19/13	14:04
MW-32	K1301274-017	J:\GC16\DATA\021913P\0219F018.D	02/19/13	16:22
MW-25	K1301274-010	J:\GC16\DATA\021913P\0219F019.D	02/19/13	16:42
MW-34	K1301274-019	J:\GC16\DATA\021913P\0219F020.D	02/19/13	17:01

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Report

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/15/2013
Date Analyzed: 03/01/2013
Time Analyzed: 19:53

Lab Control Sample Summary
Pentachlorophenol

Sample Name: Lab Control Sample
Lab Code: KWG1301660-3

Instrument ID: GC16
File ID: J:\GC16\DATA\030113PA\0301F010.D

Extraction Method: Method
Analysis Method: 8151M

Level: Low
Extraction Lot: KWG1301660

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-36	K1301274-021	J:\GC16\DATA\022513P\0225F038.D	02/26/13	03:09
MW-38	K1301274-023	J:\GC16\DATA\022513P\0225F040.D	02/26/13	03:48
MW-39	K1301274-024	J:\GC16\DATA\030113PA\0301F005.D	03/01/13	17:16
MW-40	K1301274-025	J:\GC16\DATA\030113PA\0301F006.D	03/01/13	17:36
MW-41	K1301274-026	J:\GC16\DATA\030113PA\0301F007.D	03/01/13	17:55
MW-43	K1301274-028	J:\GC16\DATA\030113PA\0301F008.D	03/01/13	18:15
Field Blank Rinsate	K1301274-030	J:\GC16\DATA\030113PA\0301F009.D	03/01/13	18:34
Method Blank	KWG1301660-4	J:\GC16\DATA\030113PA\0301F011.D	03/01/13	20:13
MW-42	K1301274-027	J:\GC16\DATA\030113PA\0301F032.D	03/02/13	01:26
MW-44	K1301274-029	J:\GC16\DATA\030113PA\0301F033.D	03/02/13	01:46
MW-3	K1301274-031	J:\GC16\DATA\030113PA\0301F034.D	03/02/13	02:05
MW-37	K1301274-022	J:\GC16\DATA\030113PA\0301F036.D	03/02/13	02:44
Batch QC	K1301266-001	J:\GC16\DATA\030113PA\0301F088.D	03/02/13	22:57
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030113PA\0301F089.D	03/02/13	23:17
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030113PA\0301F090.D	03/02/13	23:36
Batch QC	K1301266-001	J:\GC16\DATA\030413P\0304F012.D	03/04/13	12:11
Batch QCMS	KWG1301660-1	J:\GC16\DATA\030413P\0304F013.D	03/04/13	12:31
Batch QCDMS	KWG1301660-2	J:\GC16\DATA\030413P\0304F014.D	03/04/13	12:51

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/06/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12232
Instrument ID: GC16

Column: Rtx-1701

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\020613PD\0206F003.D	F	J:\GC16\DATA\020613PD\0206F009.D
B	J:\GC16\DATA\020613PD\0206F004.D	G	J:\GC16\DATA\020613PD\0206F010.D
C	J:\GC16\DATA\020613PD\0206F005.D	H	J:\GC16\DATA\020613PD\0206F011.D
D	J:\GC16\DATA\020613PD\0206F007.D	I	J:\GC16\DATA\020613PD\0206F012.D
E	J:\GC16\DATA\020613PD\0206F008.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	86500	B	2.4	86500	C	4.8	87800	D	24	78300	E	48	72700
	F	71	69400	G	95	65900	H	120	66400	I	140	63500			
4-Bromo-2,6-dichlorophenol	A	1.0	45400	B	2.5	44000	C	5.0	46300	D	25	46800	E	50	47200
	F	75	46600	G	100	45300	H	130	46100	I	150	44900			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/06/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12232
Instrument ID: GC16

Column: Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	13.0	≤ 20	
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	2.2	≤ 20	

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/06/2013
Date Analyzed: 02/06/2013

**Second Source Calibration Verification
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12232
Units: ug/L

File ID: J:\GC16\DATA\020613PD\0206F013.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	27	75200	86200	15	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/06/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12232
Instrument ID: GC16

Column: Rtx-35

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\020613PD\0206F003.D\0206R003.D	F	J:\GC16\DATA\020613PD\0206F009.D\0206R009.D
B	J:\GC16\DATA\020613PD\0206F004.D\0206R004.D	G	J:\GC16\DATA\020613PD\0206F010.D\0206R010.D
C	J:\GC16\DATA\020613PD\0206F005.D\0206R005.D	H	J:\GC16\DATA\020613PD\0206F011.D\0206R011.D
D	J:\GC16\DATA\020613PD\0206F007.D\0206R007.D	I	J:\GC16\DATA\020613PD\0206F012.D\0206R012.D
E	J:\GC16\DATA\020613PD\0206F008.D\0206R008.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	83700	B	2.4	82900	C	4.8	84700	D	24	72600	E	48	66000
	F	71	62400	G	95	58800	H	120	58800	I	140	56000			
4-Bromo-2,6-dichlorophenol	A	1.0	45300	B	2.5	46100	C	5.0	47300	D	25	45900	E	50	44400
	F	75	42800	G	100	41000	H	130	41200	I	150	39800			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Calibration Date: 02/06/2013**Initial Calibration Summary**
Pentachlorophenol**Calibration ID:** CAL12232
Instrument ID: GC16**Column:** Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	6.0		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/06/2013
Date Analyzed: 02/06/2013

**Second Source Calibration Verification
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12232
Units: ug/L

File ID: J:\GC16\DATA\020613PD\0206F013.D\0206R013.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	27	69500	79200	NA	15	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/21/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12268
Instrument ID: GC16

Column: Rtx-1701

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\022113PA\0221F075.D	F	J:\GC16\DATA\022113PA\0221F081.D
B	J:\GC16\DATA\022113PA\0221F076.D	G	J:\GC16\DATA\022113PA\0221F082.D
C	J:\GC16\DATA\022113PA\0221F077.D	H	J:\GC16\DATA\022113PA\0221F083.D
D	J:\GC16\DATA\022113PA\0221F079.D	I	J:\GC16\DATA\022113PA\0221F084.D
E	J:\GC16\DATA\022113PA\0221F080.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	78100	B	2.4	78000	C	4.8	80600	D	24	79000	E	48	69600
	F	71	66700	G	95	65900	H	120	65100	I	140	65400			
4-Bromo-2,6-dichlorophenol	A	1.0	46900	B	2.5	42300	C	5.0	44700	D	25	49000	E	50	45500
	F	75	47300	G	100	45300	H	130	45300	I	150	44800			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Calibration Date: 02/21/2013**Initial Calibration Summary**
Pentachlorophenol**Calibration ID:** CAL12268
Instrument ID: GC16**Column:** Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	9.3		≤ 20
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	4.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/21/2013
Date Analyzed: 02/21/2013

**Second Source Calibration Verification
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12268
Units: ug/L

File ID: J:\GC16\DATA\022113PA\0221F085.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	25	72000	75900	5	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/21/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12268
Instrument ID: GC16

Column: Rtx-35

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\022113PA\0221F075.D\0221R075.D	F	J:\GC16\DATA\022113PA\0221F081.D\0221R081.D
B	J:\GC16\DATA\022113PA\0221F076.D\0221R076.D	G	J:\GC16\DATA\022113PA\0221F082.D\0221R082.D
C	J:\GC16\DATA\022113PA\0221F077.D\0221R077.D	H	J:\GC16\DATA\022113PA\0221F083.D\0221R083.D
D	J:\GC16\DATA\022113PA\0221F079.D\0221R079.D	I	J:\GC16\DATA\022113PA\0221F084.D\0221R084.D
E	J:\GC16\DATA\022113PA\0221F080.D\0221R080.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	73600	B	2.4	72200	C	4.8	75800	D	24	72400	E	48	62700
	F	71	63600	G	95	59800	H	120	59000	I	140	60100			
4-Bromo-2,6-dichlorophenol	A	1.0	42800	B	2.5	42600	C	5.0	45800	D	25	46600	E	50	41600
	F	75	42200	G	100	40100	H	130	39600	I	150	39000			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301274
 Calibration Date: 02/21/2013

Initial Calibration Summary
 Pentachlorophenol

Calibration ID: CAL12268
 Instrument ID: GC16

Column: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	AverageRF	% RSD	10.2		≤ 20
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	6.2		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 02/21/2013
Date Analyzed: 02/21/2013

**Second Source Calibration Verification
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12268
Units: ug/L

File ID: J:\GC16\DATA\022113PA\0221F085.D\0221R085.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	24	66600	69600	4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 03/01/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-1701

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\030113P\0301F003.D	F	J:\GC16\DATA\030113P\0301F008.D
B	J:\GC16\DATA\030113P\0301F004.D	G	J:\GC16\DATA\030113P\0301F009.D
C	J:\GC16\DATA\030113P\0301F005.D	H	J:\GC16\DATA\030113P\0301F010.D
D	J:\GC16\DATA\030113P\0301F006.D	I	J:\GC16\DATA\030113P\0301F011.D
E	J:\GC16\DATA\030113P\0301F007.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	89000	B	2.4	83000	C	4.8	85500	D	24	73100	E	48	62000
	F	71	64800	G	95	60600	H	120	60800	I	140	58100			
4-Bromo-2,6-dichlorophenol	A	1.0	44400	B	2.5	41600	C	5.0	47200	D	25	50800	E	50	45200
	F	75	48500	G	100	46100	H	130	46800	I	150	45000			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Calibration Date: 03/01/2013**Initial Calibration Summary**
Pentachlorophenol**Calibration ID:** CAL12284
Instrument ID: GC16**Column:** Rtx-1701

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	Quadratic	COD	0.999		≥ 0.99
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	5.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Calibration Date: 03/01/2013
Date Analyzed: 03/01/2013**Second Source Calibration Verification**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration ID:** CAL12284
Units: ug/L**File ID:** J:\GC16\DATA\030113P\0301F012.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	26	70800	76100	NA	11	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 03/01/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12284
Instrument ID: GC16

Column: Rtx-35

Level ID	File ID	Level ID	File ID
A	J:\GC16\DATA\030113P\0301F003.D\0301R003.D	F	J:\GC16\DATA\030113P\0301F008.D\0301R008.D
B	J:\GC16\DATA\030113P\0301F004.D\0301R004.D	G	J:\GC16\DATA\030113P\0301F009.D\0301R009.D
C	J:\GC16\DATA\030113P\0301F005.D\0301R005.D	H	J:\GC16\DATA\030113P\0301F010.D\0301R010.D
D	J:\GC16\DATA\030113P\0301F006.D\0301R006.D	I	J:\GC16\DATA\030113P\0301F011.D\0301R011.D
E	J:\GC16\DATA\030113P\0301F007.D\0301R007.D		

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
Pentachlorophenol	A	0.95	76200	B	2.4	72000	C	4.8	75100	D	24	63400	E	48	53400
	F	71	55000	G	95	51100	H	120	50800	I	140	48500			
4-Bromo-2,6-dichlorophenol	A	1.0	41600	B	2.5	41000	C	5.0	44800	D	25	44100	E	50	38800
	F	75	41500	G	100	39100	H	130	39300	I	150	37800			

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301274
 Calibration Date: 03/01/2013

Initial Calibration Summary
Pentachlorophenol

Calibration ID: CAL12284
 Instrument ID: GC16

Column: Rtx-35

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Pentachlorophenol	MS	Quadratic	COD	0.999	≥ 0.99	
4-Bromo-2,6-dichlorophenol	SURR	AverageRF	% RSD	5.9	≤ 20	

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Calibration Date: 03/01/2013
Date Analyzed: 03/01/2013

Second Source Calibration Verification
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration ID: CAL12284
Units: ug/L

File ID: J:\GC16\DATA\030113P\0301F012.D\0301R012.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	24	27	60600	66000	NA	12	± 20 %	Quadratic

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/18/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L**File ID:** J:\GC16\DATA\021813P\0218F003.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	43	75200	67400	-10	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	48	45900	44200	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/18/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L

File ID: J:\GC16\DATA\021813P\0218F003.D\0218R003.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	69500	63100	NA	-5	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	48	43800	42000	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/18/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L**File ID:** J:\GC16\DATA\021813P\0218F015.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	75200	71200	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	51	45900	46700	2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/18/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L**File ID:** J:\GC16\DATA\021813P\0218F015.D\0218R015.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	48	69500	66600	NA	1	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	52	43800	45200	3	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/18/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L

File ID: J:\GC16\DATA\021813P\0218F027.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	75200	73700	-2	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	53	45900	48700	6	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client:
Project:JH Baxter & Company
J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/18/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L**File ID:** J:\GC16\DATA\021813P\0218F027.D\0218R027.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	50	69500	68900	NA	4	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	53	43800	46800	7	NA	± 20 %	AverageRF

ate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/18/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L**File ID:** J:\GC16\DATA\021813P\0218F034.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	75200	71100	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	51	45900	46800	2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/18/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301516
Units: ug/L**File ID:** J:\GC16\DATA\021813P\0218F034.D\0218R034.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	69500	65300	NA	-2	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	43800	44800	2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/19/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301553
Units: ug/L

File ID: J:\GC16\DATA\021913P\0219F003.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	75200	71400	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	51	45900	46700	2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/19/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301553
Units: ug/L
Column ID: Rtx-35**File ID:** J:\GC16\DATA\021913P\0219F003.D\0219R003.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	48	69500	67300	NA	2	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	52	43800	45200	3	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/19/2013

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301553
Units: ug/L

File ID: J:\GC16\DATA\021913P\0219F015.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	75200	72000	-4	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	52	45900	47500	4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/19/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301553
Units: ug/L**File ID:** J:\GC16\DATA\021913P\0219F015.D\0219R015.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	48	69500	66900	NA	1	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	52	43800	45700	4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/19/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301553
Units: ug/L

File ID: J:\GC16\DATA\021913P\0219F021.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	43	75200	68400	-9	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	49	45900	44500	-3	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/19/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/06/2013
Calibration ID: CAL12232
Analysis Lot: KWG1301553
Units: ug/L**File ID:** J:\GC16\DATA\021913P\0219F021.D\0219R021.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	69500	64400	NA	-3	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	43800	42800	-2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/26/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L

File ID: J:\GC16\DATA\022513P\0225F029.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	72000	68700	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	50	45700	45400	-1	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/26/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L

File ID: J:\GC16\DATA\022513P\0225F029.D\0225R029.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	66600	63000	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	50	42300	42200	0	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 02/26/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L

File ID: J:\GC16\DATA\022513P\0225F042.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	72000	69300	-4	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	50	45700	46100	1	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 02/26/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 02/21/2013
Calibration ID: CAL12268
Analysis Lot: KWG1301759
Units: ug/L**File ID:** J:\GC16\DATA\022513P\0225F042.D\0225R042.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	66600	63300	-5	NA	± 20 %	AverageRF
4-Bromo-2,6-dichlorophenol	50	51	42300	42900	1	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/01/2013

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F003.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	44	70800	62000	NA	-7	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	46200	45400	-2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/01/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F003.D\0301R003.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	45	60600	53500	NA	-6	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	48	40900	39200	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/01/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F017.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	64000	NA	-3	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	46900	2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/01/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F017.D\0301R017.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	54600	NA	-4	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/01/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F030.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	63900	NA	-4	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	46900	2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/01/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F030.D\0301R030.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	55200	NA	-3	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40200	-2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/02/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F038.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	64400	NA	-3	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	46800	1	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/02/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F038.D\0301R038.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	55100	NA	-3	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	$\pm 20\%$	AverageRF

values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/02/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F086.D

Column ID: Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	70800	65100	NA	-2	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	47500	3	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/02/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F086.D\0301R086.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	60600	55200	NA	-3	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40100	-2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/03/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L**File ID:** J:\GC16\DATA\030113PA\0301F098.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	46	70800	64600	NA	-2	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	46200	47200	2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/03/2013

**Continuing Calibration Verification Summary
Pentachlorophenol**

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301889
Units: ug/L

File ID: J:\GC16\DATA\030113PA\0301F098.D\0301R098.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	60600	55900	NA	-2	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	49	40900	40200	-2	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F004.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	42	70800	59200	NA	-11	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	47	46200	43800	-5	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the A.I.S Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F004.D\0304R004.D**Column ID:** Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	44	60600	53200	NA	-7	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	48	40900	39100	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274
Date Analyzed: 03/04/2013**Continuing Calibration Verification Summary**
Pentachlorophenol**Calibration Type:** External Standard
Analysis Method: 8151M**Calibration Date:** 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L**File ID:** J:\GC16\DATA\030413P\0304F015.D**Column ID:** Rtx-1701

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	47	70800	65600	NA	-1	$\pm 20\%$	Quadratic
4-Bromo-2,6-dichlorophenol	50	53	46200	48600	5	NA	$\pm 20\%$	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274
Date Analyzed: 03/04/2013

Continuing Calibration Verification Summary
Pentachlorophenol

Calibration Type: External Standard
Analysis Method: 8151M

Calibration Date: 03/01/2013
Calibration ID: CAL12284
Analysis Lot: KWG1301919
Units: ug/L

File ID: J:\GC16\DATA\030413P\0304F015.D\0304R015.D

Column ID: Rtx-35

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Pentachlorophenol	48	48	60600	57000	NA	1	± 20 %	Quadratic
4-Bromo-2,6-dichlorophenol	50	51	40900	41500	2	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M**Analysis Lot:** KWG1301516**Instrument ID:** GC16**Column:** Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0218F003.D	Continuing Calibration Verification	KWG1301516-1	2/18/2013	09:47		2/18/2013	10:02
0218F004.D	Instrument Blank	KWG1301516-2	2/18/2013	10:07		2/18/2013	10:22
0218F005.D	HCMW-7	K1301274-001	2/18/2013	10:27		2/18/2013	10:42
0218F006.D	MW-15	K1301274-002	2/18/2013	10:46		2/18/2013	11:01
0218F007.D	MW-16	K1301274-003	2/18/2013	11:06		2/18/2013	11:21
0218F008.D	MW-17	K1301274-004	2/18/2013	11:26		2/18/2013	11:41
0218F009.D	MW-18	K1301274-005	2/18/2013	11:45		2/18/2013	12:00
0218F010.D	MW-2	K1301274-006	2/18/2013	12:05		2/18/2013	12:20
0218F011.D	MW-22	K1301274-007	2/18/2013	12:25		2/18/2013	12:40
0218F012.D	MW-23	K1301274-008	2/18/2013	12:44		2/18/2013	12:59
0218F013.D	MW-23MS	KWG1301456-1	2/18/2013	13:04		2/18/2013	13:19
0218F014.D	MW-23DMS	KWG1301456-2	2/18/2013	13:23		2/18/2013	13:38
0218F015.D	Continuing Calibration Verification	KWG1301516-3	2/18/2013	13:43		2/18/2013	13:58
0218F016.D	Instrument Blank	KWG1301516-4	2/18/2013	14:03		2/18/2013	14:18
0218F017.D	MW-24	K1301274-009	2/18/2013	14:22		2/18/2013	14:37
0218F018.D	MW-25	K1301274-010	2/18/2013	14:42		2/18/2013	14:57
0218F019.D	MW-26	K1301274-011	2/18/2013	15:02		2/18/2013	15:17
0218F020.D	MW-27	K1301274-012	2/18/2013	15:21		2/18/2013	15:36
0218F021.D	MW-28	K1301274-013	2/18/2013	15:41		2/18/2013	15:56
0218F022.D	MW-29	K1301274-014	2/18/2013	16:01		2/18/2013	16:16
0218F023.D	MW-30	K1301274-015	2/18/2013	16:20		2/18/2013	16:35
0218F024.D	MW-31	K1301274-016	2/18/2013	16:40		2/18/2013	16:55
0218F025.D	MW-32	K1301274-017	2/18/2013	16:59		2/18/2013	17:14
0218F026.D	MW-33	K1301274-018	2/18/2013	17:19		2/18/2013	17:34
0218F027.D	Continuing Calibration Verification	KWG1301516-5	2/18/2013	17:39		2/18/2013	17:54
0218F028.D	Instrument Blank	KWG1301516-6	2/18/2013	17:59		2/18/2013	18:14
0218F029.D	MW-34	K1301274-019	2/18/2013	18:18		2/18/2013	18:33
0218F030.D	MW-35	K1301274-020	2/18/2013	18:38		2/18/2013	18:53
0218F031.D	Lab Control Sample	KWG1301456-3	2/18/2013	18:58		2/18/2013	19:13
0218F032.D	Method Blank	KWG1301456-4	2/18/2013	19:17		2/18/2013	19:32
0218F034.D	Continuing Calibration Verification	KWG1301516-7	2/18/2013	19:56		2/18/2013	20:11
0218F035.D	Instrument Blank	KWG1301516-8	2/18/2013	20:16		2/18/2013	20:31

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301274

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301553

Instrument ID: GC16

Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0219F003.D	Continuing Calibration Verification	KWG1301553-1	2/19/2013	10:08		2/19/2013	10:23
0219F004.D	Instrument Blank	KWG1301553-2	2/19/2013	10:27		2/19/2013	10:42
0219F005.D	MW-22	K1301274-007	2/19/2013	10:47		2/19/2013	11:02
0219F006.D	MW-23	K1301274-008	2/19/2013	12:26		2/19/2013	12:41
0219F007.D	MW-23MS	KWG1301456-1	2/19/2013	12:45		2/19/2013	13:00
0219F008.D	MW-23DMS	KWG1301456-2	2/19/2013	13:05		2/19/2013	13:20
0219F009.D	MW-24	K1301274-009	2/19/2013	13:25		2/19/2013	13:40
0219F011.D	MW-28	K1301274-013	2/19/2013	14:04		2/19/2013	14:19
0219F015.D	Continuing Calibration Verification	KWG1301553-3	2/19/2013	15:23		2/19/2013	15:38
0219F016.D	Instrument Blank	KWG1301553-4	2/19/2013	15:43		2/19/2013	15:58
0219F018.D	MW-32	K1301274-017	2/19/2013	16:22		2/19/2013	16:37
0219F019.D	MW-25	K1301274-010	2/19/2013	16:42		2/19/2013	16:57
0219F020.D	MW-34	K1301274-019	2/19/2013	17:01		2/19/2013	17:16
0219F021.D	Continuing Calibration Verification	KWG1301553-5	2/19/2013	17:21		2/19/2013	17:36
0219F022.D	Instrument Blank	KWG1301553-6	2/19/2013	17:41		2/19/2013	17:56

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301274

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301759
 Instrument ID: GC16
 Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0225F003.D	Continuing Calibration Verification	KWG1301759-1	2/25/2013	12:42		2/25/2013	12:57
0225F004.D	Instrument Blank	KWG1301759-2	2/25/2013	13:02		2/25/2013	13:17
0225F005.D	ZZZZZZ	ZZZZZZ	2/25/2013	13:37		2/25/2013	13:52
0225F006.D	ZZZZZZ	ZZZZZZ	2/25/2013	13:57		2/25/2013	14:12
0225F007.D	ZZZZZZ	ZZZZZZ	2/25/2013	14:16		2/25/2013	14:31
0225F008.D	ZZZZZZ	ZZZZZZ	2/25/2013	14:36		2/25/2013	14:51
0225F009.D	Instrument Blank	KWG1301759-3	2/25/2013	17:19		2/25/2013	17:34
0225F010.D	ZZZZZZ	ZZZZZZ	2/25/2013	17:39		2/25/2013	17:54
0225F011.D	ZZZZZZ	ZZZZZZ	2/25/2013	17:59		2/25/2013	18:14
0225F012.D	ZZZZZZ	ZZZZZZ	2/25/2013	18:18		2/25/2013	18:33
0225F013.D	ZZZZZZ	ZZZZZZ	2/25/2013	18:38		2/25/2013	18:53
0225F015.D	Instrument Blank	KWG1301759-4	2/25/2013	19:17		2/25/2013	19:32
0225F016.D	Continuing Calibration Verification	KWG1301759-5	2/25/2013	19:37		2/25/2013	19:52
0225F017.D	Instrument Blank	KWG1301759-6	2/25/2013	19:56		2/25/2013	20:11
0225F019.D	ZZZZZZ	ZZZZZZ	2/25/2013	20:55		2/25/2013	21:10
0225F020.D	ZZZZZZ	ZZZZZZ	2/25/2013	21:15		2/25/2013	21:30
0225F023.D	ZZZZZZ	ZZZZZZ	2/25/2013	22:14		2/25/2013	22:29
0225F024.D	ZZZZZZ	ZZZZZZ	2/25/2013	22:33		2/25/2013	22:48
0225F028.D	Instrument Blank	KWG1301759-7	2/25/2013	23:52		2/26/2013	00:07
0225F029.D	Continuing Calibration Verification	KWG1301759-8	2/26/2013	00:12		2/26/2013	00:27
0225F030.D	Instrument Blank	KWG1301759-9	2/26/2013	00:31		2/26/2013	00:46
0225F031.D	ZZZZZZ	ZZZZZZ	2/26/2013	00:51		2/26/2013	01:06
0225F032.D	ZZZZZZ	ZZZZZZ	2/26/2013	01:11		2/26/2013	01:26
0225F033.D	ZZZZZZ	ZZZZZZ	2/26/2013	01:30		2/26/2013	01:45
0225F034.D	ZZZZZZ	ZZZZZZ	2/26/2013	01:50		2/26/2013	02:05
0225F035.D	ZZZZZZ	ZZZZZZ	2/26/2013	02:10		2/26/2013	02:25
0225F036.D	ZZZZZZ	ZZZZZZ	2/26/2013	02:29		2/26/2013	02:44
0225F037.D	ZZZZZZ	ZZZZZZ	2/26/2013	02:49		2/26/2013	03:04
0225F038.D	MW-36	K1301274-021	2/26/2013	03:09		2/26/2013	03:24
0225F039.D	ZZZZZZ	ZZZZZZ	2/26/2013	03:28		2/26/2013	03:43
0225F040.D	MW-38	K1301274-023	2/26/2013	03:48		2/26/2013	04:03
0225F041.D	Instrument Blank	KWG1301759-10	2/26/2013	04:07		2/26/2013	04:22
0225F042.D	Continuing Calibration Verification	KWG1301759-11	2/26/2013	04:27		2/26/2013	04:42
0225F043.D	Instrument Blank	KWG1301759-12	2/26/2013	04:47		2/26/2013	05:02

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301889
Instrument ID: GC16
Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F003.D	Continuing Calibration Verification	KWG1301889-1	3/1/2013	16:37		3/1/2013	16:52
0301F004.D	Instrument Blank	KWG1301889-2	3/1/2013	16:56		3/1/2013	17:11
0301F005.D	MW-39	K1301274-024	3/1/2013	17:16		3/1/2013	17:31
0301F006.D	MW-40	K1301274-025	3/1/2013	17:36		3/1/2013	17:51
0301F007.D	MW-41	K1301274-026	3/1/2013	17:55		3/1/2013	18:10
0301F008.D	MW-43	K1301274-028	3/1/2013	18:15		3/1/2013	18:30
0301F009.D	Field Blank Rinsate	K1301274-030	3/1/2013	18:34		3/1/2013	18:49
0301F015.D	ZZZZZZ	ZZZZZZ	3/1/2013	18:54		3/1/2013	19:09
0301F017.D	Continuing Calibration Verification	KWG1301889-3	3/1/2013	19:14		3/1/2013	19:29
0301F018.D	Instrument Blank	KWG1301889-4	3/1/2013	19:33		3/1/2013	19:48
0301F010.D	Lab Control Sample	KWG1301660-3	3/1/2013	19:53		3/1/2013	20:08
0301F011.D	Method Blank	KWG1301660-4	3/1/2013	20:13		3/1/2013	20:28
0301F020.D	ZZZZZZ	ZZZZZZ	3/1/2013	20:32		3/1/2013	20:47
0301F021.D	ZZZZZZ	ZZZZZZ	3/1/2013	20:52		3/1/2013	21:07
0301F022.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:12		3/1/2013	21:27
0301F023.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:31		3/1/2013	21:46
0301F024.D	ZZZZZZ	ZZZZZZ	3/1/2013	21:51		3/1/2013	22:06
0301F025.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:10		3/1/2013	22:25
0301F026.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:30		3/1/2013	22:45
0301F027.D	ZZZZZZ	ZZZZZZ	3/1/2013	22:50		3/1/2013	23:05
0301F028.D	ZZZZZZ	ZZZZZZ	3/1/2013	23:09		3/1/2013	23:24
0301F029.D	Instrument Blank	KWG1301889-5	3/1/2013	23:29		3/1/2013	23:44
0301F030.D	Continuing Calibration Verification	KWG1301889-6	3/1/2013	23:49		3/2/2013	00:04
0301F031.D	Instrument Blank	KWG1301889-7	3/2/2013	00:08		3/2/2013	00:23
0301F032.D	MW-42	K1301274-027	3/2/2013	01:26		3/2/2013	01:41
0301F033.D	MW-44	K1301274-029	3/2/2013	01:46		3/2/2013	02:01
0301F034.D	MW-3	K1301274-031	3/2/2013	02:05		3/2/2013	02:20
0301F035.D	ZZZZZZ	ZZZZZZ	3/2/2013	02:25		3/2/2013	02:40
0301F036.D	MW-37	K1301274-022	3/2/2013	02:44		3/2/2013	02:59
0301F037.D	Instrument Blank	KWG1301889-8	3/2/2013	03:04		3/2/2013	03:19
0301F038.D	Continuing Calibration Verification	KWG1301889-9	3/2/2013	03:24		3/2/2013	03:39
0301F039.D	Instrument Blank	KWG1301889-10	3/2/2013	03:43		3/2/2013	03:58
0301F040.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:03		3/2/2013	04:18
0301F041.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:22		3/2/2013	04:37

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington

Service Request: K1301274

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301889
 Instrument ID: GC16
 Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F042.D	ZZZZZZ	ZZZZZZ	3/2/2013	04:42		3/2/2013	04:57
0301F043.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:01		3/2/2013	05:16
0301F044.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:21		3/2/2013	05:36
0301F045.D	ZZZZZZ	ZZZZZZ	3/2/2013	05:40		3/2/2013	05:55
0301F046.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:00		3/2/2013	06:15
0301F047.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:20		3/2/2013	06:35
0301F048.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:39		3/2/2013	06:54
0301F049.D	ZZZZZZ	ZZZZZZ	3/2/2013	06:59		3/2/2013	07:14
0301F050.D	Instrument Blank	KWG1301889-11	3/2/2013	07:18		3/2/2013	07:33
0301F051.D	Continuing Calibration Verification	KWG1301889-12	3/2/2013	07:38		3/2/2013	07:53
0301F052.D	Instrument Blank	KWG1301889-13	3/2/2013	07:58		3/2/2013	08:13
0301F053.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:17		3/2/2013	08:32
0301F054.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:37		3/2/2013	08:52
0301F055.D	ZZZZZZ	ZZZZZZ	3/2/2013	08:56		3/2/2013	09:11
0301F056.D	ZZZZZZ	ZZZZZZ	3/2/2013	09:16		3/2/2013	09:31
0301F057.D	ZZZZZZ	ZZZZZZ	3/2/2013	09:36		3/2/2013	09:51
0301F058.D	Instrument Blank	KWG1301889-14	3/2/2013	09:55		3/2/2013	10:10
0301F059.D	Continuing Calibration Verification	KWG1301889-15	3/2/2013	10:15		3/2/2013	10:30
0301F060.D	Instrument Blank	KWG1301889-16	3/2/2013	10:34		3/2/2013	10:49
0301F061.D	ZZZZZZ	ZZZZZZ	3/2/2013	14:43		3/2/2013	14:58
0301F062.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:03		3/2/2013	15:18
0301F063.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:23		3/2/2013	15:38
0301F064.D	ZZZZZZ	ZZZZZZ	3/2/2013	15:42		3/2/2013	15:57
0301F065.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:02		3/2/2013	16:17
0301F066.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:22		3/2/2013	16:37
0301F067.D	ZZZZZZ	ZZZZZZ	3/2/2013	16:43		3/2/2013	16:58
0301F069.D	ZZZZZZ	ZZZZZZ	3/2/2013	17:22		3/2/2013	17:37
0301F071.D	Instrument Blank	KWG1301889-17	3/2/2013	17:42		3/2/2013	17:57
0301F072.D	Continuing Calibration Verification	KWG1301889-18	3/2/2013	18:01		3/2/2013	18:16
0301F073.D	Instrument Blank	KWG1301889-19	3/2/2013	18:21		3/2/2013	18:36
0301F086.D	Continuing Calibration Verification	KWG1301889-21	3/2/2013	22:18		3/2/2013	22:33
0301F087.D	Instrument Blank	KWG1301889-22	3/2/2013	22:38		3/2/2013	22:53
0301F088.D	Batch QC	K1301266-001	3/2/2013	22:57		3/2/2013	23:12
0301F089.D	Batch QCMS	KWG1301660-1	3/2/2013	23:17		3/2/2013	23:32

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington

Service Request: K1301274

Analysis Run Log
Pentachlorophenol

Analysis Method: 8151M

Analysis Lot: KWG1301889

Instrument ID: GC16

Column: Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0301F090.D	Batch QCDMS	KWG1301660-2	3/2/2013	23:36		3/2/2013	23:51
0301F095.D	ZZZZZZ	ZZZZZZ	3/3/2013	01:14		3/3/2013	01:29
0301F097.D	Instrument Blank	KWG1301889-23	3/3/2013	01:54		3/3/2013	02:09
0301F098.D	Continuing Calibration Verification	KWG1301889-24	3/3/2013	02:13		3/3/2013	02:28
0301F099.D	Instrument Blank	KWG1301889-25	3/3/2013	02:33		3/3/2013	02:48
0301F100.D	ZZZZZZ	ZZZZZZ	3/3/2013	02:52		3/3/2013	03:07
0301F102.D	ZZZZZZ	ZZZZZZ	3/3/2013	03:32		3/3/2013	03:47
0301F103.D	ZZZZZZ	ZZZZZZ	3/3/2013	03:51		3/3/2013	04:06
0301F104.D	ZZZZZZ	ZZZZZZ	3/3/2013	04:11		3/3/2013	04:26
0301F105.D	Instrument Blank	KWG1301889-26	3/3/2013	04:30		3/3/2013	04:45
0301F106.D	Continuing Calibration Verification	KWG1301889-27	3/3/2013	04:50		3/3/2013	05:05
0301F107.D	Instrument Blank	KWG1301889-28	3/3/2013	05:09		3/3/2013	05:24

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington**Service Request:** K1301274**Analysis Run Log**
Pentachlorophenol**Analysis Method:** 8151M**Analysis Lot:** KWG1301919**Instrument ID:** GC16**Column:** Rtx-1701

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0304F004.D	Continuing Calibration Verification	KWG1301919-1	3/4/2013	09:34		3/4/2013	09:49
0304F005.D	Instrument Blank	KWG1301919-2	3/4/2013	09:54		3/4/2013	10:09
0304F006.D	ZZZZZZ	ZZZZZZ	3/4/2013	10:14		3/4/2013	10:29
0304F008.D	ZZZZZZ	ZZZZZZ	3/4/2013	10:53		3/4/2013	11:08
0304F010.D	ZZZZZZ	ZZZZZZ	3/4/2013	11:32		3/4/2013	11:47
0304F012.D	Batch QC	K1301266-001	3/4/2013	12:11		3/4/2013	12:26
0304F013.D	Batch QCMS	KWG1301660-1	3/4/2013	12:31		3/4/2013	12:46
0304F014.D	Batch QCDMS	KWG1301660-2	3/4/2013	12:51		3/4/2013	13:06
0304F015.D	Continuing Calibration Verification	KWG1301919-3	3/4/2013	13:10		3/4/2013	13:25
0304F016.D	Instrument Blank	KWG1301919-4	3/4/2013	13:30		3/4/2013	13:45

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Extracted: 02/14/2013

Extraction Prep Log
Pentachlorophenol

Extraction Method: METHOD
Analysis Method: 8151M

Extraction Lot: KWG1301456
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
HCMW-7	K1301274-001	02/11/13	02/13/13	5mL	1mL	NA	
MW-15	K1301274-002	02/11/13	02/13/13	5mL	1mL	NA	
MW-16	K1301274-003	02/10/13	02/13/13	5mL	1mL	NA	
MW-17	K1301274-004	02/10/13	02/13/13	5mL	1mL	NA	
MW-18	K1301274-005	02/11/13	02/13/13	5mL	1mL	NA	
MW-2	K1301274-006	02/11/13	02/13/13	5mL	1mL	NA	
MW-22DL	K1301274-007	02/11/13	02/13/13	5mL	1mL	NA	
MW-22	K1301274-007	02/11/13	02/13/13	5mL	1mL	NA	
MW-23DL	K1301274-008	02/11/13	02/13/13	5mL	1mL	NA	
MW-23	K1301274-008	02/11/13	02/13/13	5mL	1mL	NA	
MW-24DL	K1301274-009	02/11/13	02/13/13	5mL	1mL	NA	
MW-24	K1301274-009	02/11/13	02/13/13	5mL	1mL	NA	
MW-25DL	K1301274-010	02/11/13	02/13/13	5mL	1mL	NA	
MW-25	K1301274-010	02/11/13	02/13/13	5mL	1mL	NA	
MW-26	K1301274-011	02/11/13	02/13/13	5mL	1mL	NA	
MW-27	K1301274-012	02/11/13	02/13/13	5mL	1mL	NA	
MW-28DL	K1301274-013	02/11/13	02/13/13	5mL	1mL	NA	
MW-28	K1301274-013	02/11/13	02/13/13	5mL	1mL	NA	
MW-29	K1301274-014	02/11/13	02/13/13	5mL	1mL	NA	
MW-30	K1301274-015	02/10/13	02/13/13	5mL	1mL	NA	
MW-31	K1301274-016	02/11/13	02/13/13	5mL	1mL	NA	
MW-32	K1301274-017	02/11/13	02/13/13	5mL	1mL	NA	
MW-32DL	K1301274-017	02/11/13	02/13/13	5mL	1mL	NA	
MW-33	K1301274-018	02/11/13	02/13/13	5mL	1mL	NA	
MW-34	K1301274-019	02/11/13	02/13/13	5mL	1mL	NA	
MW-34DL	K1301274-019	02/11/13	02/13/13	5mL	1mL	NA	
MW-35	K1301274-020	02/11/13	02/13/13	5mL	1mL	NA	
Method Blank	KWG1301456-4	NA	NA	5mL	1mL	NA	
MW-23MS	KWG1301456-1	02/11/13	02/13/13	5mL	1mL	NA	
MW-23DMS	KWG1301456-2	02/11/13	02/13/13	5mL	1mL	NA	
Lab Control Sample	KWG1301456-3	NA	NA	5mL	1mL	NA	

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

QA/QC Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Extracted: 02/15/2013

Extraction Prep Log
Pentachlorophenol

Extraction Method: Method
 Analysis Method: 8151M

Extraction Lot: KWG1301660
 Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-36	K1301274-021	02/10/13	02/13/13	5mL	1mL	NA	
MW-37	K1301274-022	02/10/13	02/13/13	5mL	1mL	NA	
MW-38	K1301274-023	02/11/13	02/13/13	5mL	1mL	NA	
MW-39	K1301274-024	02/10/13	02/13/13	5mL	1mL	NA	
MW-40	K1301274-025	02/10/13	02/13/13	5mL	1mL	NA	
MW-41	K1301274-026	02/10/13	02/13/13	5mL	1mL	NA	
MW-42	K1301274-027	02/11/13	02/13/13	5mL	1mL	NA	
MW-43	K1301274-028	02/11/13	02/13/13	5mL	1mL	NA	
MW-44	K1301274-029	02/11/13	02/13/13	5mL	1mL	NA	
Field Blank Rinsate	K1301274-030	02/12/13	02/13/13	5mL	1mL	NA	
MW-3	K1301274-031	02/11/13	02/13/13	5mL	1mL	NA	
Method Blank	KWG1301660-4	NA	NA	5mL	1mL	NA	
Batch QC DL	K1301266-001	NA	NA	5mL	1mL	NA	
Batch QC	K1301266-001	NA	NA	5mL	1mL	NA	
Batch QCMS	KWG1301660-1	NA	NA	5mL	1mL	NA	
Batch QCDMS	KWG1301660-2	NA	NA	5mL	1mL	NA	
Lab Control Sample	KWG1301660-3	NA	NA	5mL	1mL	NA	

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COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-22
Lab Code: K1301274-007

Units: ug/L
Basis: NA
Level: Low

Extraction Method: METHOD
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	180	210	15.4	D	10	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-23 **Units:** ug/L
Lab Code: K1301274-008 **Basis:** NA
Extraction Method: METHOD **Level:** Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	10	3.2	420	510	19.4	D	20	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-24
Lab Code: K1301274-009

Units: ug/L
Basis: NA
Level: Low

Extraction Method: METHOD
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	230	280	19.6	D	10	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-25 **Units:** ug/L
Lab Code: K1301274-010 **Basis:** NA
Extraction Method: METHOD **Level:** Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	50	16	1700	2000	16.2	D	100	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-26 Units: ug/L
Lab Code: K1301274-011 Basis: NA
Extraction Method: METHOD Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.16	0.19	0.28	38.3	J	1	02/18/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013
 Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-28 Units: ug/L
 Lab Code: K1301274-013 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	1.5	0.48	64	75	15.8	D	3	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-29 Units: ug/L
Lab Code: K1301274-014 Basis: NA
Extraction Method: METHOD Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.16	16	18	11.8		1	02/18/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/11/2013
 Date Received: 02/13/2013
 Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-32 Units: ug/L
 Lab Code: K1301274-017 Basis: NA
 Extraction Method: METHOD Level: Low
 Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	2.5	0.80	83	93	11.4	D	5	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/14/2013

Pentachlorophenol

Sample Name: MW-34 Units: ug/L
Lab Code: K1301274-019 Basis: NA
Extraction Method: METHOD Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	25	8.0	590	630	6.6	D	50	02/19/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013
 Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-36 Units: ug/L
 Lab Code: K1301274-021 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	260	270	3.8	D	10	02/26/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-38 Units: ug/L
Lab Code: K1301274-023 Basis: NA
Extraction Method: Method Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	0.50	0.16	0.39	0.39	0.0	J	1	02/26/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/10/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-39 Units: ug/L
Lab Code: K1301274-024 Basis: NA
Extraction Method: Method Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	93	93	0.0	D	10	03/01/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/10/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-40
Lab Code: K1301274-025
Extraction Method: Method
Analysis Method: 8151M

Units: ug/L
Basis: NA
Level: Low

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	180	180	0.0	D	10	03/01/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
 Project: J.H. Baxter/Arlington
 Sample Matrix: Water

Service Request: K1301274
 Date Collected: 02/10/2013
 Date Received: 02/13/2013
 Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-41 Units: ug/L
 Lab Code: K1301274-026 Basis: NA
 Extraction Method: Method Level: Low
 Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	49	50	2.0	D	10	03/01/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-42 Units: ug/L
Lab Code: K1301274-027 Basis: NA
Extraction Method: Method Level: Low
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	2.5	0.80	44	44	0.0	D	5	03/02/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-44
Lab Code: K1301274-029

Units: ug/L
Basis: NA
Level: Low

Extraction Method: Method
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	5.0	1.6	280	280	0.0	D	10	03/02/13

COLUMBIA ANALYTICAL SERVICES, INC.

Now part of the ALS Group

Confirmation Results

Client: JH Baxter & Company
Project: J.H. Baxter/Arlington
Sample Matrix: Water

Service Request: K1301274
Date Collected: 02/11/2013
Date Received: 02/13/2013
Date Extracted: 02/15/2013

Pentachlorophenol

Sample Name: MW-3
Lab Code: K1301274-031

Units: ug/L
Basis: NA
Level: Low

Extraction Method: Method
Analysis Method: 8151M

Analyte Name	MRL	MDL	Primary Result	Confirmation Result	RPD	Q	Dilution Factor	Date Analyzed
Pentachlorophenol	2.5	0.80	110	110	0.0	D	5	03/02/13



APPENDIX D

Quality Assurance Review



QUALITY ASSURANCE REVIEW

Site Investigation – Supplemental Groundwater Sampling and Remedial Action

Pilot Study Performance Monitoring

J. H. Baxter Arlington, Washington Facility

Prepared for:

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Prepared by:

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April 15, 2013

Project No. 361M125611.0001.4

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QUALITY ASSURANCE REVIEW
Site Investigation – Supplemental Groundwater Sampling and Remedial
Action Pilot Study Performance Monitoring
J. H. Baxter Arlington, Washington Facility

1.0 INTRODUCTION

AMEC Environment & Infrastructure, Inc. (AMEC) performed a Level III validation of the analytical data from groundwater samples collected at the J. H. Baxter Arlington, Washington facility. Thirty-two groundwater samples, two field duplicates, and one field blank were collected between February 10 and 12, 2013. The samples were submitted to Columbia Analytical Services, Inc. (CAS, now part of the ALS Group) located in Kelso, Washington, where they were analyzed for pentachlorophenol (PCP) and/or breakdown products by Modified United States Environmental Protection Agency (EPA) Method 8151A and/or polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270-selective ion monitoring (SIM). A list of these samples by field sample identification (ID), sample collection date, and CAS sample ID is presented in Table 1.

This data validation has been performed in accordance with:

- Baxter, 2002. Sampling and Analysis and Data Management Plan for the Site Investigation Work Plan J. H. Baxter Arlington Facility (SADMP)
- EPA, 2008. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review, EPA/540-R-08-01.
- EPA, 2001. Region 9 Superfund Data Evaluation/Validation Guidance, Version 1, R9QA/006.1, December, 2001.

The EPA CLP guidelines were written specifically for the CLP, and have been modified for the purposes of this data review where they differ from method-specific quality control (QC) requirements.

The laboratory's certified analytical report and supporting documentation were reviewed to assess the following:

- Data package and electronic data deliverable completeness
- Chain of custody (COC) compliance
- Holding time compliance

- Initial calibration (ICAL), initial calibration verification (ICV), and calibration verification standard (CVS) compliance with method-specified criteria
- Presence or absence of laboratory contamination as demonstrated by method blanks
- Accuracy and bias as demonstrated by recovery of surrogate spikes and laboratory control samples (LCSs)
- Analytical precision as relative percent difference (RPD) of analyte concentration between laboratory duplicates
- Sampling and analytical precision as RPD of analyte concentration between field duplicates
- Assessment of field contamination as demonstrated by field blanks
- Insofar as possible, the degree of conformance to method requirements and good laboratory practices

In general, it is important to recognize that no analytical data are guaranteed to be correct, even if all QC audits are passed. Strict QC serves to increase confidence in data, but any reported value may potentially contain error.

2.0 DEFINITIONS OF QUALIFIERS THAT MAY BE ADDED DURING VALIDATION

- U** The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
- NJ** The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

3.0 DATA VALIDATION FINDINGS

3.1 CUSTODY, PRESERVATION, AND COMPLETENESS

Sample custody was maintained as required from sample collection to receipt at the laboratory. The samples were received intact, properly preserved, and at temperatures less than the EPA-recommended maximum of 6 degrees Celsius (°C), with the following exceptions:

- According to the CAS's sample receipt documentation, the average cooler temperature associated with all samples was high at 6.5°C. The samples were received at the laboratory more than 24 hours after sampling and AMEC J qualified the detected results and UJ qualified the nondetected results because of the elevated receipt temperatures. (J/UJ-RT)

The laboratory reports are complete and contain results for all samples and tests requested on the COCs.

3.2 PENTACHLOROPHENOL BY EPA METHOD 8151 MODIFIED

3.2.1 Holding Times

The samples were extracted within the method-required maximum holding time of seven days from collection and the sample extracts were analyzed within the method-required maximum holding time of 40 days from extraction.

3.2.2 Initial Calibration

Relative standard deviations (RSDs) were less than the EPA-recommended maximum of 20% and coefficients of determination were greater than the EPA-recommended minimum of 0.99 in the ICALs associated with the analysis of these samples.

3.2.3 Initial Calibration Verification

An ICV was analyzed after each ICAL. The percent differences (%Ds) from the ICAL were within the EPA-recommended 70% to 130% limits.

3.2.4 Calibration Verification

CVSs were analyzed at the beginning of each analytical shift and after every 10 samples. The %Ds from the ICAL were less than the EPA-recommended maximum of 20%.

3.2.5 Blank Analyses

Laboratory Blanks

Laboratory blanks were analyzed at the required frequency of one per extraction batch. Target analytes were not detected in the laboratory blanks associated with the analysis of these samples.

Field Blank

Target analytes were not detected in the field rinsate blank associated with these samples.

3.2.6 Surrogate Analyses

Surrogate compounds were added to all samples, blanks, and QC samples as required.

Recoveries of the surrogate compound 4-bromo-2,6-dichlorophenol were within the SADMP-specified 38% to 119% limits.

3.2.7 Laboratory Control Sample Analyses

The laboratory reported LCS/LCS duplicates (LCSDs) at the required frequency of one per extraction batch. Recovery and RPD values were compared to the SADMP criteria, or laboratory limits for analytes not listed in the SADMP. Recovery and RPD values are acceptable.

3.2.8 Matrix Spike/Matrix Spike Duplicate Analyses

Matrix spikes (MS)/MS duplicate (MSD) analyses were performed on samples EW 1-4 Comp and MW-23. Recovery and RPD values were compared to the SADMP criteria, or laboratory control limits for analytes not listed in the SADMP. Recovery and RPD values were acceptable, with the following exceptions:

- Total tetrachlorophenols (275%/272%) and PCP (260%-MSD) recoveries were high in the MS and/or MSD performed on sample EW 1-4 Comp. Data limitations are summarized below.
 - Total tetrachlorophenols were not detected in the unspiked native sample and data usability is not adversely affected by the potentially high analytical bias.
 - The background PCP concentration in the unspiked native sample, at 820 micrograms per liter ($\mu\text{g}/\text{L}$), was more than the spike concentration of 10 $\mu\text{g}/\text{L}$ and it is not possible to evaluate data usability for this analyte based on MS recoveries.
- PCP recoveries were low at -40% in the MS and high at 130% in the MSD performed on sample MW-23. The PCP concentration in the unspiked native sample, at 420 $\mu\text{g}/\text{L}$, was more than the spike concentration of 10 $\mu\text{g}/\text{L}$ and it is not possible to evaluate data usability for this analyte based on MS recoveries.

3.2.9 Laboratory Reporting Limits

The SADMP-specified quantitation requirement goals were met for all samples that were analyzed undiluted.

3.2.10 Field Duplicates

Two field duplicates were analyzed for PCP. Sample BXS-5 is a field duplicate of sample BXS-1 and sample MW-44 is a field duplicate of MW-24. Field duplicate results are summarized in Table 2. RPDs between the primary and duplicate samples were less than the SADMP-specified maximum limit of 30%.

3.2.11 Data Reporting and Analytical Procedure

CAS J qualified detected analytes with concentrations between the method detection limit (MDL) and the RL. AMEC agrees that these results are quantitatively uncertain and maintained CAS' J qualifiers.

3.3 POLYCYCLIC AROMATIC HYDROCARBONS BY EPA METHOD 8270D SIM

3.3.1 Holding Times

The samples were extracted within the method-required maximum holding time of seven days from collection and the sample extracts were analyzed within the method-required maximum holding time of 40 days from extraction.

3.3.2 Instrument Tuning and Mass Calibration

The tuning compound decafluorotriphenylphosphine was analyzed at the beginning of each 12-hour analytical shift all relative abundance criteria meet method-specified limits.

3.3.3 Initial Calibration

RSDs were less than the method-specified maximum of 20% in the ICALs associated with the analysis of these samples. Additionally, RRFs were greater than the method-specified minimums of:

- 0.4 for dibenzo(a,h)anthracene and 2-methylnaphthalene;
- 0.5 for benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene;
- 0.6 for fluoranthene and pyrene;
- 0.7 for anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, naphthalene, and phenanthrene;

- 0.8 for benzo(a)anthracene; and
- 0.9 for acenaphthene, acenaphthylene, and fluorene.

3.3.4 Initial Calibration Verification

An ICV was analyzed after each ICAL. RRFs were greater than the EPA-recommended minimums and %Ds from the ICAL were less than the EPA-recommended maximum of 30%.

3.3.5 Calibration Verification

CVSs were analyzed at the beginning of each 12-hour analytical shift. RRFs were greater than the EPA-recommended minimums and %Ds from the ICAL were less than the EPA-recommended maximum of 20%.

3.3.6 Blank Analyses

Method Blanks

Method blanks were analyzed at the required frequency of one per extraction batch. Target analytes were not detected in the method blanks, with the following exception:

- Fluorene and phenanthrene were detected at concentrations of 0.0043 µg/L and 0.0065 µg/L, respectively, in the laboratory blank associated with the PAH analysis of samples MW-2, MW-3, MW-15, MW-16, MW-17, MW-18, MW-30, MW-35, MW-36, and MW-37. Data limitations are summarized below.
 - AMEC U qualified the detected fluorene result from sample MW-36 (0.0056 µg/L) because the concentration detected in the sample was less than five times the concentration detected in the blank. (U-MB)
 - Fluorene and phenanthrene were not detected in the remaining samples and data usability is not adversely affected.

Field Blank

One field blank, with the sample ID Field Blank/Rinsate, was analyzed for PAHs.

2-Methylnaphthalene (0.0048 µg/L) and naphthalene (0.018 µg/L) were detected in the field blank. Samples BXS-1, BXS-2, and BXS-5 were collected on the same day as the field blank. Data limitations are summarized below.

- AMEC U qualified the detected 2-methylnaphthalene and naphthalene results from sample BXS-1 (0.0052 µg/L and 0.011 µg/L), BXS-2 (0.0065 µg/L and 0.014 µg/L), and BXS-5 (0.0046 µg/L and 0.0071 µg/L) because the concentrations detected in the samples were less than five times the concentration detected in the blank. (U-RB)

3.3.7 Surrogate Analyses

Surrogate compounds were added to all samples, blanks, and QC samples as required. Surrogate recoveries were within the SADMP-specified 31% to 97% limits for fluorene-d₁₀, 31% to 113% limits for fluoranthene-d₁₀, and 30% to 115% limits for terphenyl-d₁₄.

3.3.8 Internal Standard Evaluation

Internal standards (ISs) were added to all samples, blanks and QC samples as required. All IS recoveries were within the SADMP-specified -50% to +100% limits.

3.3.9 Laboratory Control Sample Analyses

The laboratory processed and analyzed LCS/LCSDs at the required frequency of one per extraction batch. Recovery and RPD values were compared to the SADMP criteria, or laboratory limits for analytes not listed in the SADMP. Recovery and RPD values are acceptable.

3.3.10 Matrix Spike/Matrix Spike Duplicate Analyses

Project-specific MS/MSDs were not performed on PAH samples from this project because of insufficient sample volume. The laboratory provided LCS and LCSD data to demonstrate acceptable analytical precision and accuracy.

3.3.11 Laboratory Reporting Limits

The SADMP reporting limit goals were met for all samples.

3.3.12 Field Duplicates

One field duplicate was analyzed for PAHs. Sample BXS-5 is a field duplicate of sample BXS-1. Field duplicate results are summarized in Table 2. RPDs between the primary and duplicate samples were less than the SADMP-specified maximum limit of 30%.

3.3.13 Data Reporting and Analytical Procedure

CAS J qualified detected analytes with concentrations between the MDL and the RL. AMEC agrees that these results are quantitatively uncertain and maintained CAS' J qualifiers.

3.4 OVERALL ASSESSMENT OF DATA USABILITY

The data are fully usable with the addition of the qualifiers specified in Sections 3.2 and 3.3, which are summarized in Table 3

AMEC reviewed a total of 258 results from these samples and all results from field samples were J or UJ qualified as estimated values because of elevated sample receipt temperatures. Forty-seven results (18%) were additionally qualified because of analyte concentrations between the MDL and the RL and seven (2.7%) were U qualified as being not detected because of detections in the associated field and laboratory blanks. The data met the SADMP-specified minimum completeness goal of 95% usable data.

REFERENCES

Baxter, 2002. Sampling and Analysis and Data Management Plan for the Site Investigation Work Plan J. H. Baxter Arlington Facility, Revision 2. Prepared by the J. H. Baxter Project Team for EPA Region 10. May 15, 2002.

EPA, 1996. Method 8151A, Chlorinated Herbicides by GC Using Methylation or Pentafluorobenzylation Derivatization, Revision 1. December 1996.

EPA, 2001. Region 9 Superfund Data Evaluation/Validation Guidance, Version 1, R9QA/006.1, December, 2001.

EPA, 2007. Method 8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4. February 2007.

EPA, 2008. EPA Contract Laboratory Program (CLP) National Functional Guidelines for Superfund Organic Methods Data Review, EPA/540-R-08-01.

LIMITATIONS

This report was prepared exclusively for J.H. Baxter by AMEC Environment & Infrastructure, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Quality assurance Review is intended to be used by J.H. Baxter for the J.H. Baxter Arlington, Washington Facility only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.



TABLES

Table 1
Field Samples Submitted to Columbia Analytical Services
with Corresponding Laboratory Identifications
J.H. Baxter - Arlington

Field Sample ID	Collection Date	CAS Sample ID	Notes
EW 1-4 Comp	2/11/2013	K1301266-001	
BXS-1	2/12/2013	K1301272-001	
BXS-2	2/12/2013	K1301272-002	
BXS-5	2/12/2013	K1301272-003	Field duplicate of BXS-1
HCMW-7	2/11/2013	K1301274-001	PCP only
MW-15	2/11/2013	K1301274-002	
MW-16	2/10/2013	K1301274-003	
MW-17	2/10/2013	K1301274-004	
MW-18	2/11/2013	K1301274-005	
MW-2	2/11/2013	K1301274-006	
MW-22	2/11/2013	K1301274-007	PCP only
MW-23	2/11/2013	K1301274-008	PCP only
MW-24	2/11/2013	K1301274-009	PCP only
MW-25	2/11/2013	K1301274-010	PCP only
MW-26	2/11/2013	K1301274-011	PCP only
MW-27	2/11/2013	K1301274-012	PCP only
MW-28	2/11/2013	K1301274-013	PCP only
MW-29	2/11/2013	K1301274-014	PCP only
MW-30	2/10/2013	K1301274-015	
MW-31	2/11/2013	K1301274-016	PCP only
MW-32	2/11/2013	K1301274-017	PCP only
MW-33	2/11/2013	K1301274-018	PCP only
MW-34	2/11/2013	K1301274-019	PCP only
MW-35	2/11/2013	K1301274-020	
MW-36	2/10/2013	K1301274-021	
MW-37	2/10/2013	K1301274-022	
MW-38	2/11/2013	K1301274-023	PCP only
MW-39	2/10/2013	K1301274-024	PCP only
MW-40	2/10/2013	K1301274-025	PCP only
MW-41	2/10/2013	K1301274-026	PCP only
MW-42	2/11/2013	K1301274-027	PCP only
MW-43	2/11/2013	K1301274-028	PCP only
MW-44	2/11/2013	K1301274-029	Field duplicate of MW-24
Field Blank/Rinsate	2/12/2013	K1301274-030	
MW-3	2/11/2013	K1301274-031	

Notes:

MS/MSD = matrix spike/matrix spike duplicate

PCP = pentachlorophenol

Table 2
Field Duplicate Detections
J.H. Baxter - Arlington

Analyte	RL ($\mu\text{g/L}$)	Primary Sample ($\mu\text{g/L}$)	Field Duplicate ($\mu\text{g/L}$)	Relative Percent Difference	Notes
Samples MW-24 and MW-44					
Pentachlorophenol	5.0	230	280	20%	
Samples BXS-1 and BXS-5					
Pentachlorophenol	2.5	56	60	6.9%	
Anthracene	0.019	0.0036 U	0.0066 J	NC	\pm RL
Benzo(g,h,i)perylene	0.019	0.0034 J	0.0029 U	NC	
Fluorene	0.019	0.0050 J	0.0044 J	13%	
Indeno(1,2,3-cd)pyrene	0.019	0.0030 J	0.0026 U	NC	

Notes:

$\mu\text{g/L}$ = micrograms per liter

NC = not calculable

RL = reporting limit

\pm RL = The difference between analyte concentrations is less than the RL.

Qualifier Definition:

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Table 3
Qualifiers Added During Validation
J.H. Baxter - Arlington

Sample ID	Analyte	Concentration	Qualifiers and Reason Codes
BXS-1	2-Methylnaphthalene	0.0052 µg/L	UJ RB, RT
	Benzo(g,h,i)perylene	0.0034 µg/L	J DL, RT
	Fluorene	0.0050 µg/L	J DL, RT
	Indeno(1,2,3-cd)pyrene	0.0030 µg/L	J DL, RT
	Naphthalene	0.011 µg/L	UJ RB, RT
BXS-2	2-Methylnaphthalene	0.0065 µg/L	UJ RB, RT
	Anthracene	0.0067 µg/L	J DL, RT
	Fluorene	0.0055 µg/L	J DL, RT
	Naphthalene	0.014 µg/L	UJ RB, RT
	Pyrene	0.010 µg/L	J DL, RT
BXS-5	2-Methylnaphthalene	0.0046 µg/L	UJ RB, RT
	Anthracene	0.0066 µg/L	J DL, RT
	Fluorene	0.0044 µg/L	J DL, RT
	Naphthalene	0.0071 µg/L	UJ RB, RT
MW-2	2-Methylnaphthalene	0.0063 µg/L	J DL, RT
	Anthracene	0.0044 µg/L	J DL, RT
	Naphthalene	0.013 µg/L	J DL, RT
MW-3	2-Methylnaphthalene	0.0039 µg/L	J DL, RT
	Anthracene	0.0068 µg/L	J DL, RT
	Naphthalene	0.013 µg/L	J DL, RT
MW-15	Anthracene	0.0038 µg/L	J DL, RT
	Naphthalene	0.012 µg/L	J DL, RT
MW-16	Naphthalene	0.0097 µg/L	J DL, RT
MW-17	Naphthalene	0.0075 µg/L	J DL, RT
MW-26	Pentachlorophenol (PCP)	0.19 µg/L	J DL, RT
MW-30	2-Methylnaphthalene	0.0037 µg/L	J DL, RT
	Naphthalene	0.014 µg/L	J DL, RT
MW-36	2-Methylnaphthalene	0.0043 µg/L	J DL, RT
	Anthracene	0.012 µg/L	J DL, RT
	Fluorene	0.0056 µg/L	UJ MB, RT
	Naphthalene	0.0068 µg/L	J DL, RT
MW-37	Indeno(1,2,3-cd)pyrene	0.0027 µg/L	J DL, RT
	Naphthalene	0.0044 µg/L	J DL, RT
MW-38	Pentachlorophenol (PCP)	0.39 µg/L	J DL, RT

Notes:

µg/L = micrograms per liter

All results were J or UJ qualified because of elevated sample receipt temperatures. AMEC only included results in this table that were also qualified because of other reasons.

Qualifier Definitions:

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

Reason Code Definitions:

DL = The analyte concentration is between the method detection limit and the reporting limit.

MB = The analyte was detected in the sample and the associated method blank. The concentration detected in the sample was less than five times the concentration detected in the blank.

RB = The analyte was detected in the sample and the associated equipment blank. The concentration detected in the sample was less than five times the concentration detected in the blank.